

SEQUENCE LISTING

<110> Daniel Cohen  
Ilya Chumakov

<120> TREATMENT OF CNS DISORDERS USING D-AMINO ACID OXIDASE AND D-ASPARTATE  
OXIDASE ANTAGONISTS

<130> 101.US5.PRO

<140>

<141> 2002-01-16

<150> 60/261,883

<151> 2001-01-16

<150> 60/305,445

<151> 2001-07-13

<150> 60/

<151> 2001-10-22

<150> 60/333,881

<151> 2001-11-19

<160> 26

<170> Patent.pm

<210> 1

<211> 86592

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 38388..40388

<223> 5'regulatory region

<220>

<221> exon

<222> 40389..40670

<223> exon Z

<220>

<221> exon

<222> 42666..42778

<223> exon A

<220>

<221> exon

<222> 43416..43519

<223> exon B

<220>

<221> exon

<222> 61159..61402

<223> exon C

<220>  
 <221> exon  
 <222> 64050..64711  
 <223> exon Ulong

<220>  
 <221> exon  
 <222> 64578..64711  
 <223> exon U

<220>  
 <221> exon  
 <222> 68126..68261  
 <223> exon V

<220>  
 <221> exon  
 <222> 69488..69690  
 <223> exon 2

<220>  
 <221> exon  
 <222> 71942..72056  
 <223> exon 3

<220>  
 <221> exon  
 <222> 73962..74038  
 <223> exon 4

<220>  
 <221> exon  
 <222> 74701..74766  
 <223> exon 5

<220>  
 <221> exon  
 <222> 77478..77532  
 <223> exon 6

<220>  
 <221> exon  
 <222> 78762..78866  
 <223> exon 7

<220>  
 <221> exon  
 <222> 81507..81589  
 <223> exon 8

<220>  
 <221> exon  
 <222> 83181..83298  
 <223> exon 9

<220>  
 <221> exon  
 <222> 83879..83977

```

<223> exon 10

<220>
<221> exon
<222> 84906..85423
<223> exon 11

<220>
<221> exon
<222> 84906..85541
<223> exon 11long

<220>
<221> misc_feature
<222> 85542..86592
<223> 3'regulatory region

<220>
<221> allele
<222> 6199
<223> 24-1443-126 : polymorphic base C or T

<220>
<221> allele
<222> 44814
<223> 24-1457-52 : polymorphic base A or C

<220>
<221> allele
<222> 72600
<223> 27-93-181 : polymorphic base A or G

<220>
<221> allele
<222> 84046
<223> 24-1461-256 : polymorphic base A or G

<220>
<221> primer_bind
<222> 6074..6094
<223> 24-1443.pu

<220>
<221> primer_bind
<222> 6559..6579
<223> 24-1443.rp complement

<220>
<221> primer_bind
<222> 44763..44782
<223> 24-1457.pu

<220>
<221> primer_bind
<222> 45257..45277
<223> 24-1457.rp complement

<220>
<221> primer_bind

```

<222> 72359..72378

<223> 27-93.rp

<220>

<221> primer\_bind

<222> 72763..72780

<223> 27-93.pu complement

<220>

<221> primer\_bind

<222> 83791..83811

<223> 24-1461.pu

<220>

<221> primer\_bind

<222> 84307..84324

<223> 24-1461.rp complement

<220>

<221> primer\_bind

<222> 6180..6198

<223> 24-1443-126.mis

<220>

<221> primer\_bind

<222> 6200..6218

<223> 24-1443-126.mis complement

<220>

<221> primer\_bind

<222> 44795..44813

<223> 24-1457-52.mis

<220>

<221> primer\_bind

<222> 44815..44833

<223> 24-1457-52.mis complement

<220>

<221> primer\_bind

<222> 72581..72599

<223> 27-93-181.mis

<220>

<221> primer\_bind

<222> 72601..72619

<223> 27-93-181.mis complement

<220>

<221> primer\_bind

<222> 84027..84045

<223> 24-1461-256.mis

<220>

<221> primer\_bind

<222> 84047..84065

<223> 24-1461-256.mis complement

<220>

<221> misc\_binding  
 <222> 6187..6211  
 <223> 24-1443-126.probe

<220>  
 <221> misc\_binding  
 <222> 44802..44826  
 <223> 24-1457-52.probe

<220>  
 <221> misc\_binding  
 <222> 72588..72612  
 <223> 27-93-181.probe

<220>  
 <221> misc\_binding  
 <222> 84034..84058  
 <223> 24-1461-256.probe

<400> 1  
 attattggaa caggccacac ttgcgagggga agtccctgcc tcagaaagat tcagaaaagc 60  
 tagacagtca ctggaagaac aattacaacc gcaagacggt caaacactaa acaccgctat 120  
 gcctcagaac cgtacagata atggccaaat agatggggct ctgggcattt ctgagagcac 180  
 ctgcctgggtg gcaccccatc ctaatggacc atgccctcca gtctccaagt ggctcttcag 240  
 agctcacatc cgaacacctc ctatgctaca gggtcttcta gcccaggtt cccaaccacc 300  
 ccaaggccac agaggccagc cccaactcca tcttctacat gtgtcacagg aaactttctc 360  
 atagtgtctat ttattatgta ctgcgggggt gggggccatg tcataaaaaga aatgtcctcc 420  
 cttttttatt catctccttc taacaagcat caaagtctca gtgcctagca tgtgacttac 480  
 agaagctctc atgggaacaa gacaagacca tactgttacc gtgacactca cggcctccct 540  
 gactggtttc tgctgttgat tctgcctcaa atgtccctca aatgcacctt gctgctccgc 600  
 ctccacccta gagctcgctt gactgcccac ttgcccgtta agagtcggct taggcttcac 660  
 tcctgccaga aaggtcctgc caggtgtctt caacagtcac cccctcctgt ggtctcacia 720  
 aaccccagca cctctcggtc actctctccc tcctatctgg ttgtgactgt cttccatgct 780  
 cacttagaag ctctctgagg ccaagaactg tgtgtactgt tgcttctttg tttacctggg 840  
 cctagcccat tgctctatac acaggagaat gcaaataaat catatgctta atgaatgagt 900  
 cgatgaatga atgatgaata aagggaatct aatctagttt taacaaatcc aggttttgca 960  
 atgatctcac aggcattcat ttatcttgtg atgtcagggg agtgactcca cctcatttc 1020  
 acacgcatct tggggccaat gctctaactt acttggcctc cagttagtgg gaaattacaa 1080  
 gctacacttc aagcctctga ctaggacctg ccatgaagta cttgggaatc agtggagtat 1140  
 cactgtgggg tgaggtgtct gaggcgaggg ccaccaatct ccatacttct ccccgggccc 1200  
 ctctgctga gaggtctcc ctgcttccct tggcagactc tgggtttggc ttctgggttc 1260  
 ggcgttgttg tcacctcctt caggaagcat ttctggctaa ggtgccccac tctatagcag 1320  
 ctggtgtaaa acctctctaa gcaaacagca taactttctg tctctcaat tgactctgag 1380  
 ttctgagagc acagcctgga gctggcacgg tgccctggcac agagagctga aatggcacac 1440  
 cctagtgttc ccagtggctc gactccccag gctctccatc aggacgcagc cctctcccac 1500  
 ctctgatgga tatgggacca tggaatgctt tgtccagcag caactcttgc ctccctcaca 1560  
 gaagggaaca cctagcccat cagactcacc ttctcttact ggaaaagtcc actcccagca 1620  
 agatattctc ctcggtgtcc tggcgcccgc tgctgtacac caccacctg taccggacct 1680  
 ggtccgcccc ggcgctctcc aggcgcactg cctggaacag ggcagacatg ctctcactaa 1740  
 cctgcctttg gaggtgggtc ctccctccca tctccaatgc aagatcaaca ctttcagtgt 1800  
 tctaccttcc cctctgggag ttaaaaatga agagaaaatt cttggctggg catggtgggt 1860  
 caggcctgta atcccagcac tttgggaggg caaggtaggc agatcacttg aggtcaggag 1920  
 ttcgagacca gcctggccaa catggcaaaa ccccatctct tactaaaaat acaaaaatta 1980  
 gctgggcatg gtggcggtgc cctgtaatcc cagctactca ggggactgag gcacgagaat 2040  
 ctcttgaaac cggaagcgg aggttgcaat gagctgagat catgccacca catgccagcc 2100  
 agagcgacag agtgagattc tgtctcaaac aacaacaaca caaacgaa caaagcggaa 2160  
 gttcttgaca gcaggaaacc ggcctcgttt ctctctgtag caccagggac gccgcctggc 2220  
 tcagaggaat cacccaaaat gcaagaaatc agtgaacaca tgaaatccaa agaaagtctg 2280  
 tatttagctt atttaactgc cgtggagacc tgtttcatcc ctctcccgcc ccctctgggg 2340

aactgaggag	tcaacctggc	tttggcttta	gtgcacaatt	tgagaatttg	ttgtaaccta	2400
aaagcttttc	cccttatcat	tcacgaattg	ttccccacca	ggtttcacaa	ttaaaaatta	2460
aaacttgctg	gctgggcacg	gtggcttaca	cctataactc	caggactttg	ggaggcagag	2520
gcaggagaat	catttgaggc	caggagtcca	agaccagcct	gggcaaaata	gcaagacccc	2580
atatccacaa	aattttttta	aaaataaggc	aggggtggtac	acacttgtag	tcccagctat	2640
ccaggaggct	gagggtgggaa	gattgcttga	acccaggagt	ttgaggctgt	agttagctaa	2700
gatcatgcca	ctgcactcca	gcctgggcaa	cagagcaaga	ccctcatctc	acaaaaatta	2760
aaaaaaaaatt	ttttaacttg	acattctcac	tgttctttac	cagcttgatt	ctgtcttcgc	2820
aacgcagaag	gttgatcatc	acctgaagat	gttgaggcag	atcacctgtt	ggaccaataa	2880
agaaagcttt	aaaaggcttc	ttacctactc	tctaggaaaa	aaaacctctg	aaaggctgac	2940
tttgagggct	tggaaaaaga	ttgagaagtt	aaaatttgct	tacctacacc	acaggagaat	3000
caccacaaaa	acttcaagtc	tgaatttctc	ttacaccact	ctgaatactg	tgcgacgtgg	3060
atgggtgaca	tggagcttac	tgtcatgttg	ttaaaagttg	ctcttatttc	ctgaaataca	3120
tacagtatag	gtttccaaat	acaaaatgtg	aaaaatacag	gcaagcctag	agaaaaatgt	3180
tatttcattc	aagccaatgt	tactcggcag	gttgggggtgc	ctagaaacga	cagctgtggc	3240
tggaagtaag	gcatttgcta	agagttaatc	attagagaaa	aaggacagag	catcacgttt	3300
cctcttcaaa	caacttcttc	ttctatacag	agtctcgcac	tgtcacccag	gctggagtgc	3360
agtggtagca	tctcagctca	ctgcaacctc	cgcctcctgg	attcaacaga	ttcttctgct	3420
tcagcctcct	aagtagctgg	gattacaggt	gccccatcac	agaccgggt	aatttttgtta	3480
tttatagtag	agatggagtt	tcacctagtt	ggccaggctg	gtctcgaact	cctgacctca	3540
agtgatctgc	acgcttcagc	ctcccaaagt	gctgggatta	caggcataag	ctaccccacc	3600
caggccccac	ttcaaaacttc	tgcattttcc	actggaggca	gacattattt	ccataaccgg	3660
gggggctggg	ggaaatgttt	aagtgactct	acagatagca	gctgtatgct	ggttgcccag	3720
agaaataatt	tgaatagaaa	ccaatctgtc	attttctctt	ttcttgctaa	aaattatgta	3780
ctcttttttc	ttcactatgt	aaaacaggca	gtaaccaggg	acggcttctg	aacttctctg	3840
agctgccccca	gggttcagga	ggtgttcctg	gagtgcagtg	aggaaagtct	cttactggcc	3900
atgagtctctg	cgcgaagcag	agaccctgtc	agaagaagcg	cacactttca	cggaggggaa	3960
agttgtaagg	gagggtgcata	attagtaagt	agcagggtgtg	actccaaggt	tgcttttttt	4020
ctctagactta	cacatttttc	tttatatttc	caaggatttc	tttctgaaga	aagggtcatc	4080
tgtagagatg	ctaatactag	cctgggtgtg	tggtctacac	ctgtaatccc	agtgtcttgg	4140
gaggccgagg	caggagactc	acttgaggcc	aggcattcaa	gaccagtctg	ggcaacatgg	4200
caagaccccc	tctctacaga	aaagtaaaaa	attagctggg	ctttctgggt	cacatctgta	4260
gtcccagcta	cttgggaggc	caaggcagga	ggatcgctgg	agcccaggag	tttgagatca	4320
ccctgggcaa	cacgataaga	ccctgtctct	acaaaggaaa	aaaaattact	ctatacatca	4380
caattacaac	cccaaaagga	tcaataatgc	ttacacactc	aatgctcca	aaaggaaaca	4440
ttgtgtttgt	tccttttgca	aaagcatctt	tttcatttta	agggagaagg	acagatgatg	4500
tccaaattgc	acttcctgtc	tcagagagga	attgggtcat	tagaaaattg	tgctcttagc	4560
caggagggta	gatctcatgt	taagcgttct	ttctttttct	ttttttttca	atagagacag	4620
ggttttgcca	tgttgccag	gctgggtctg	aactcctgga	ctcaaagtat	cctctcacct	4680
cagcctccca	aagtgtctgg	attataggca	tgagccacca	aaccaggcc	aattaagcat	4740
tctttccaca	ataagtaaaa	tttaaaaaag	aaaagaacca	tgccctctct	atctgtcctc	4800
tccagttata	caattccaca	gtgtataaca	ccctgtgttg	accctgcttc	ctatgatgag	4860
cgatttgagg	ataagggttc	acattaaaga	aagccataga	cctccccagc	cccttctctc	4920
accgtcatg	tcaccaatgc	aacacaacga	caacgacat	gagctgggtc	ttcacctgcc	4980
tgggcccctc	caccatctac	ccgagtcaca	gaactgcatt	ggggaaagca	aaaacaaacc	5040
cctgtctgat	aaatgcctaa	atgaaaggga	cattttccac	acagataaac	ttcttttcagt	5100
gggattgttt	gctgagatat	ggaactgctg	acagacagaa	atccaaaccc	cagtctgaca	5160
tccacacaca	aaaaaatcag	agaatataag	ccctagaaag	ggtctcaaatt	tgactggact	5220
ggctgaaaca	aactgaacta	ctttttccaag	gacagaatta	accctcaatt	gtactcagct	5280
ctgcacagtg	gttactgggg	ggcctctggg	acattcagga	gacttgatgg	taattctagg	5340
gaaaaaaagg	aactaacgta	agtctagtct	gcgtctgtcc	caaggtcatt	tacagaccaa	5400
ctgtggacag	ctggcgccc	ctctgccttc	cgacctcatc	gtccactcca	gacctcaggg	5460
cacaagagtc	agccagctgg	tggcttgcat	cctacccttc	tagtcttttg	attagaggaa	5520
ggaggtatct	gacacttagt	gagcagagct	tgagcatttg	ctttgtcata	tgtgttacaa	5580
ttaaaacatg	aacaacagct	acattttctaa	gagggcagaa	taattagcaa	attcaagaac	5640
gaagaatctg	gctgagtatg	gcacctcaaa	ccataatacc	caatgctttg	agaggctgag	5700
gtggggagat	ggcttgaggc	caggagttgg	acataagcct	gagcaacata	gtgagtgaga	5760
cctcatctac	acacacacac	acacacacac	acacaactag	ctgggtgtgg	tgacacgcat	5820
ctatggtccc	agctactcag	gaagctaagg	ctggacaatc	acttgagccc	aggaggtcga	5880

ggctgcagtg	agctatgatc	aggccactgc	acgccagcct	gggcaagaga	atgagatccg	5940
tctctaaaaa	aactttttcat	ataattaaaa	aaaaaaaaaag	aatgaagggt	ctgttttatag	6000
ctgtattgta	ctagaagtca	tcgtaataac	aatgatagtt	acccatatat	atatacacga	6060
cctactacag	gtagggtatgt	tacacgcata	actctaaatt	tccatattgt	ctgaggcacc	6120
agtattttgat	gcccattgta	aagactagga	aactgagggt	tagaagtcga	cctgttacgg	6180
cttagtaagt	tggagaacya	ggatcagaag	acagggtctgc	ctggcttcaa	aacaaatact	6240
atttccacaa	accacactgc	ctccttgtag	aggacagtta	ttttctttgc	ttaaaacaga	6300
cctaaatatt	atcaacatca	gtatgtgaaa	atactgactg	agccttggtg	tttgctataa	6360
attgcatggg	gtagaattct	aacctgagca	ctcagatcta	aaatgaagct	gaatgacttg	6420
aggttaaaca	aacaaaatgt	tcacaagaaa	actggccaca	atagctgggt	ggtttcacct	6480
gctgctgttc	tgaaggttaa	aggcctttctc	agctcacaga	cattcaatta	tgcactgcct	6540
ctccaagaaa	tgccctgaga	tgctgtccac	ctacgacaaa	gatccactta	catgcaagca	6600
ctttttcctc	tttctttctt	tttgagatag	ggctcttttc	ttttgtcacc	caggctggag	6660
tgcagtggcg	caatcgtggc	tcactgagca	acacagtggg	caacatagtg	agacctcatt	6720
tacatacaca	cccacaaaaa	actagctggc	tgtgggtgaca	catcagcctc	gacctcctgg	6780
gctcaagcaa	tcctcccacc	tcagccccc	accttgctgg	gattacaggc	atgcgccacc	6840
acgccagct	aatttttgta	ttttttgcag	agatagggtt	tcactgtgtt	gttcgggtta	6900
gtctggaact	cctgggttca	agcgagatct	gcccaccttg	gcctcccaaa	tcctggaatt	6960
acaggcaaga	gccaccgtgc	ctggccataa	gtgtgttttg	ttgttattgt	ttttaagaaa	7020
cagagtctct	ctctgtcacc	caggctggag	tgcagtggcg	tgatcctagc	ttgctgcagc	7080
ctcaaaactcc	tgggtccaag	cgatcctccc	aactcagcct	cccaaagcac	tgggattaca	7140
gggtgtgagat	accatgcagg	gccacgcaag	catctcttga	attcctcttt	ctaactgcct	7200
tcagctctga	gtcaagtctc	ctaagaaaac	cagtcttact	acttagtagg	cacttcttat	7260
ttaaactcag	tttgatcttc	accctattac	ttctgtctac	ttcctaaaaa	caaactatta	7320
cagaatcaag	acttcttact	acagtgtcta	tctcagagtt	ggagccaaag	gcccttcaag	7380
aaattctcca	aatgagtgtt	tttcaaatgc	ttggagaaat	ccatcccaag	attaggtata	7440
cagcactcca	gatggttatt	ttcaagtggg	cgacatctgg	ctataattca	ttttgggtgca	7500
tttgttaaaa	agtcaggctg	taacttacag	cctgcaatta	actgataaac	tacagagagg	7560
aaatctttgc	atcccagcag	gatgctgctg	accttactcc	tgacgcagac	agacatgaca	7620
taaaagggtg	gaaaatgtgc	gtgggtctgct	caagagagag	catctgagcc	tctgcctgca	7680
ctggctcactg	caaaactgcg	tccactatgt	ctaaggcctt	caaactcagc	aacatcacca	7740
acaatggaag	tttctctctg	tgtccagaaa	agaagctcca	atgtaagagt	atcaacttag	7800
agccctcacc	tgcatgcttg	tgggggtgct	gaagactccg	ctggccttga	gggctgcttc	7860
cctgttgtaa	gaagagggtg	gcgcctttca	ccatgaaaaa	gctctcactt	aagctgggaa	7920
ggataagacc	agagcacagt	tagaccggaa	ttcagacagg	aaaatggaca	aagaattact	7980
gcaggggaaa	aagcttttag	gtggacaaaat	ggcatgtaaa	atgcaaatag	gatgaaactg	8040
ctttttataat	aattccacgt	agtacttttc	tcaaaccttg	cttttgctaa	aagcttgctg	8100
ctggagaatt	ttcgtgacaa	aataatgctt	ctgtgacaac	acccaaagtt	ctacataggc	8160
tctccaggcg	ccctttctgc	agaatactgg	acagggtact	cactgtcata	taacattttc	8220
ttctttcttt	tttttttgag	acgcagtttc	actctgtcat	ccaggctgga	gtacagtggg	8280
gtgatctcaa	ctcactgcaa	cctctgcctc	ctgggttcaa	gcgattctca	tgtctcagcc	8340
tccccagaag	ctgagattac	aggcatgtgc	caccatggcc	agctaattat	tgtattatta	8400
gtagagacat	ggttttacca	tgttggccag	gctgggtctca	aactcctgac	ctccagcaat	8460
ctgcctgctt	aggcctcctg	gagtgtctgtg	attacaggcg	tgaccacgcc	cagccataac	8520
atttttctaag	aaaagagaac	aactccctga	ttaggagagg	gcagtctact	ttgtgaattc	8580
tcagtctctt	gctgttgatc	tctgtttcta	actctctggc	ttttaacaac	tccattgttt	8640
cttggtgact	tcccttgatg	gaatacaagg	atgaaattac	actttcacta	gttgtttgca	8700
ttttaagaaa	agtggggagg	ggccgggtgg	ctcaagcctg	taatcccagc	attttgggag	8760
gccaaggcag	tggatcactt	gagggtcagga	gttcgagacc	agtctggcca	acatggtgaa	8820
accctgtctc	tactaaaaat	gcaaaaatta	gccaggcggtg	gtggcacatg	cctgtaatcc	8880
cagctactca	gaaggctgag	gcacaagaat	cgcttacttg	agccccaggg	acggagggtt	8940
gagtgcagca	agatcgaccc	acgcaccact	gcactccagc	ctgggcgaca	gagcaagact	9000
gtgtctcaaa	aaaaaaaaaa	gaaagaaaga	aagaaagaaa	aaagtgggtg	gatactgact	9060
tgtgatttaa	cttagtcaag	gttgtcctgt	ccactattct	tgaggaaaaac	ctcaagttgg	9120
cccaatgaat	ttctcagcag	aatgaatctt	tggcctttgt	tatttttagct	agcaataaca	9180
tttataacta	ctataactt	taaaaattac	aattaaaaaa	tgtttatttg	ggaggctggg	9240
gtggaaggat	catttgagcc	caggagtctg	agaccagcct	gggcaacggt	gtgagacccc	9300
gtcgtacatc	aaaagttttt	attttttaatt	tcactttcat	gacttggcta	tcaagctctg	9360
cttttgcaaa	aattaagaca	taagaaaaga	atgcttcagc	tatgaattac	tatcaattgt	9420

tcaaaaatac	catcaactct	caaaattatg	cataaaatac	acccaaaatta	ttaacaacgg	9480
ctttgcggga	ggtgggggag	gaggaggaat	agattatctt	ctagtatttt	ccaaatgttc	9540
tatatataaac	atatattaac	cttataaaaca	tctacttttg	tttgattctc	aaaataatat	9600
aaaacactac	tatataat	aaaaagaaca	ttctaactct	aataatttca	taaaaggagg	9660
tcacagttca	aattgtaggc	aactataaaa	atctcgctct	tgaacaacca	atgaacatat	9720
acatgatttg	aaggaaaaat	ccctaagaaa	aagcagtctt	ctaattaaag	agaaccttga	9780
aattaagtaa	atcaattcct	gacagaaaga	cgaagatgtt	ttctgtaata	caagaaagca	9840
agatcacctt	tgccccagac	atctaattgt	agtagttaaa	cgttcgaatt	ctggaataaa	9900
aaactcagca	aagtctaaag	tatgactctg	ggtgcccaaga	aaatgccaca	ggaactagca	9960
tttccaatca	gcagctcctg	agatcaggaa	gactgttatg	ttctatgata	taaagtccac	10020
aataaaaatc	gttagttttt	ctgggttaaat	gctcatgcta	aaaatagtga	ctgctcaaat	10080
attaagtaag	aagacttagt	tttgccttct	tgttcagctc	tctgaattcc	aggcaattgg	10140
ttttcgatat	cttgtgacac	caataacttga	catctaacag	cattttgtcc	actactgcag	10200
atgcactgcc	gagtcacctt	ttccaccctc	tcacaggcat	atattttgtg	tgcaagggtc	10260
aagtgttgag	gagctcagga	ttataaataa	cgaagaaaac	gagaagcagc	ctttcttttg	10320
tgtctcacc	tcactcatag	gaagtaaaaa	gctcttttag	atccatctgg	ccgatctcat	10380
ttcacaggct	gcagaatcac	ctaacccttt	ccacctgcaa	agcttgtcac	tctctccttc	10440
cttagaatct	caagctgag	tatgttttca	gaactgttct	tagacacaga	tcatttacta	10500
tttattctca	tcaaaaatctg	aaacagctat	gcgagagggt	ccaaactcat	gaaacctaaa	10560
acaaccatca	gttcatcgaa	gcagctggga	aaatcttttc	gagacaacat	caactgcttt	10620
tgttcatgag	attaaaaaaa	aaaaattcat	actgaccaga	aaccaagca	cgctggaac	10680
agccaaccat	taacgatgac	ctttgccttg	gaaaccatga	gcaaaaattc	cccttggttt	10740
cccttatatt	tccttttgaa	aaaaaaagga	acaatgcaac	agactaggct	ggtttcactc	10800
tgtgatcact	tacaaggcca	gctgttcctc	ctccatgttc	ctacactgat	aagaatcagg	10860
gactcctgct	ctacgcagga	agtcaggatg	gcattgattg	gggccctgga	acactctgcc	10920
tctgttcccc	cacgacaatc	aagtaacagg	catttactgt	aaaaagcaag	actggaagct	10980
gcagggaagc	ccaagtagca	gcgcattatc	ccgaagctgt	gagatcacc	tgctgcctgc	11040
aaatacagtc	aggagataca	gccagaggaa	accgcacgac	atgactctcc	gggtgggggg	11100
tggggtggga	ggccgcagag	catggtcagt	cacaggattt	atgaaaacaa	gatgcagaaa	11160
gtctctgtga	cccgtcttcc	tggcttctct	tctgagctca	ctctggggcc	agagcctcat	11220
gcgcctctg	cgtggctgac	ctgaatactg	tatctgacga	ctgcagcttc	tgatgccag	11280
aggcacaggc	tcccgaattca	tcagaccctc	aaagtgtccc	actggggaag	tccatgaaga	11340
aatccacatt	ggtgatggca	cgtcactttt	accagggtgt	tgggggccagg	aagcccaaac	11400
ccacaagcca	tccatcccag	cccccagaaa	gtcactcttc	tcacaaaaga	tctgagtgtc	11460
ctaaaaggag	tgactaaagt	tacaaaagg	cagacgcaga	cagacaaaac	ggaaatgtct	11520
tctccaccg	ctgtaagaaa	aatcttgatg	agggataaaa	aaaaaaaaag	ccgctgccct	11580
ctctaccgc	caactggaat	gttttttatct	ccaccacaca	gatctgttct	cggacactga	11640
ttactgccat	tcgggaagct	tcataagatt	aaagtttctc	caaagcattg	aagacagaca	11700
aaaaacctca	atcaaaagctc	ctcaaaaac	cccaggcccc	caaaatataa	acagccagtg	11760
tcattccagaa	accaagccat	ggcaggaaac	cagtaactcag	ggtggtcata	cgtactaatt	11820
tgagctggaa	acctctggac	agcagaagca	gtgggttggc	tgaagggaaga	tgacgaagtc	11880
ggtaaaaataa	aagagggttcg	tggtctgcagt	gctcacatct	ctaactgtcc	ctacaactgc	11940
cctccgagct	ctggccatct	gtccctatg	gagatcagga	aaagccagga	ggctgccgag	12000
tgcttccacg	agggctgggg	agccaactcc	tcctcagagt	cctaccgcaa	aagcaaatgg	12060
ctcttggtga	actcttgtct	tcctctgata	ttttggctga	aaaaggccct	tgtcccagca	12120
catcctgatg	aaagaggggc	attcagcaaa	acagctgagg	ttcctctaatt	cactgcactc	12180
ctacgggctt	ttctgtaggc	cggagaaaaca	agcaccgggg	tgtgcattcg	acattgtgag	12240
ggcaaaacaac	tgcccccaag	gaaccaaccc	caagcaacaa	gaccccttc	cgattcaaat	12300
caacattctg	aaggatgact	ctttctttca	aatcagcatc	catttaccga	acggtgacgg	12360
tgacgtgggc	agctgccgca	gttagttatt	ctgcgtactc	aaagcacggg	tacatcctga	12420
aaattcttca	gtcatgctaa	cagctatctg	aggggacacg	ccaggtagag	gggaccacat	12480
gcacacctat	gaggagctct	gggatacgca	cgggtgcccc	ggcaggtcag	gctgcaaagg	12540
tcctaaagg	tggagggtgtg	atcccaaacc	ctccaggcac	aagccagcca	agagctgtgt	12600
tttttagcgtt	tctttcagtg	agagaaaataa	gttcaggatg	tgaataacca	tgacgcagga	12660
gagaattgaa	taagtacctt	aagaaaagggg	ctcggctagg	gtttacaaga	gggaggagg	12720
agcatttaac	tggtgacttc	tggaacaatt	cctgaaggaa	gcagactga	gtaggggctt	12780
ctcttccctc	ggctcacaag	tgaccaagcg	atcctcccta	cggattaagt	gaaacacaca	12840
ttaccatgat	tctggttttg	cagggtgagga	aaccccagct	tgcttaggag	cacatatctc	12900
tacaagatgg	ggctggactc	acatctatct	gccccacgcc	cacctgctta	acccctgtta	12960



agcagctgtt	ctactcatcc	agaatgaaaa	tcagagccat	tatgctgcgg	tcacatccgc	13020
tcagcctgc	ccaggtgcct	aatggcaaa	ccactaaggc	actgagaagt	cagaatgtgg	13080
atcacatctt	ccgtccttct	tcccagtggt	tgaatgcac	atgctgtgga	aagagagaga	13140
aggaaccatt	caagcaaa	gaactccagg	aagacgagac	tgtgccgggg	ttcttccatc	13200
tgcccaagta	gaaatcagaa	gggcagggga	cccacagcct	tatcctaccc	accactgccg	13260
tcatagttgg	gggacaggac	acatcctttg	gcccttctgc	actgcataga	ggctaaggag	13320
ttctgtaaac	cacacagcca	cgctgaccaa	gaagtgcgtt	tcaaggtaag	tttctcatca	13380
acaggactat	tatttactga	ggatctccca	tgtggccaag	gctgtaggag	gtacttagct	13440
acgccacgtc	attgaactct	ggcagttctg	cagggttaag	tattttctcc	atatgacaaa	13500
cgaaggaagc	ccgtcaacaa	ttccaaaata	gaatcaccag	ggatagcatg	gacaacgccc	13560
atggtgactg	ccgcgcttta	aggtttaaga	aaagtaaaaa	ctgggggtga	tgactcattc	13620
ctgtaatccc	agcacttttg	gaggctgaga	tgggtggatc	atttgaggtc	aggagttcga	13680
gactagcatg	gtcaacatgg	caaaacctg	tctctactaa	aaatacaaaa	attagccagg	13740
tgtggtggtg	catgcctgta	atcccagcta	ctcaggaggc	tgaggcagag	aatcacttga	13800
acccaggagg	cggagggttg	agtgaaccaa	gatcgcacca	ctgtactcca	gcctgggcca	13860
caaagtga	cactgtcttg	ggcagggg	gtggggaaca	aaagtaaaaa	caatggtctg	13920
ggaattcata	tttctgggtt	ccaatttaca	ttctaccata	tatactctga	ttaaccctta	13980
gaattaaccc	ctagaattcc	ttacagggtt	ctgttcattc	atccaaacag	gcaaacattt	14040
gcagagcatg	gagcacagg	taagccaagc	cagcccaagc	tctgataagg	gcaaagacag	14100
ccatcctctt	taaggaatgg	gtatatgtgc	tgggtgatctg	ggtgtctgcc	ctgctgcata	14160
gaaacagcat	ttcttgaaga	acaaaaatag	taggtataga	aacatcacag	tatggaatat	14220
caaacacccc	ctgaattcca	actctggtca	tacattgaaa	caacctatca	aactcctaaa	14280
acacattcat	gcccaggtcc	agcctcagca	gagtcctaatt	cggaaggctc	gtgatgagtc	14340
ctgggcatct	acttttttaa	aaagttccag	ggagctgggc	atggtagctc	atgcctgtaa	14400
tcacagcact	ttgggaggtc	aaagtgggag	aatcagttga	cccctggagt	tcaagattaa	14460
cctgggcaac	gtaacaagat	cccattctcta	caaaaaata	aaaataaaat	tagctaggct	14520
tgggtggtgtg	tgctgtagt	cccagctgct	caggaggctg	aggtgggaga	atcacttgag	14580
cctggtgagg	tcaaggctac	agtgaagctg	gaccacacca	ctgcactcca	acctgggaga	14640
cagatcttgt	ctccagaaa	ttccaggggg	tgtctctgat	gcacagccaa	gttttaaaaa	14700
cctcagaatt	aaataacatc	atggccaggc	atggtggctc	acgcctgtaa	tcctggcact	14760
ttgggaggcc	aaggtgggtg	gatcacttga	ggtcaggagt	tcaagaccag	cctggaaaac	14820
atggtgaaac	ccagtcttta	ctaaaaatac	aaaaattagc	tgagcgtggt	gacgcacact	14880
tgtagtccca	gcttcttggg	aagctgaggc	acgagaatca	cttgtaccct	ggaggctcgag	14940
gctgcactga	gtggagattg	tgatcctgga	gtccccactg	cactccagcc	tggatgagag	15000
tgagactgtc	tcaaaaaaca	acacacaaac	aaacaacatc	agaagacaca	gagaaaacag	15060
tcttctccat	gggtctcata	aagatacctc	tcacataggt	acacgtcgat	gttttctgct	15120
ggtaaaaggt	aacaccaaca	aaaaggcatg	gtgctctcag	aagggtgggtg	atgtgattag	15180
gtgcaataaa	gggagggtat	gctagggtca	aaaacaaaat	aatactctct	ttggaagcag	15240
taaaacagat	ctagtcttct	tactacacac	tttcagagac	ctgaatgttc	ttctggccct	15300
ctaaggggaga	cgctgcatca	tgacaatacg	aatgatgac	agtgaagca	aaaacagatc	15360
agacctgtgc	tgtgtgaaac	agacatgggg	tctcgctatg	ttgcccaggc	tggctctcaa	15420
ctcctgagct	caagcgattg	ttccgccttg	gcctcccaaa	gtgctggggg	gacagctgtg	15480
agccaccgag	accaacctca	gatcagacct	ttgacaaact	ctgctgtgga	caaagcattc	15540
tgggtgaatgt	caactcatct	gatcttcaca	aaaccgtgtg	gaagaccaga	caggcattat	15600
tacactaatt	tatgcctaag	gaaacagggg	gttaaatagt	acaaatttag	gattttctgat	15660
gctgtatctc	gaaaaaaaag	tagagaatat	gagcctgaag	aagaggccct	gtaaaagggtc	15720
ccagattgat	gggacaggct	gagacaaacg	gaatcacttt	tccttgata	gaactaacc	15780
tcaatggtac	cccactctgc	atggtgatta	ctgaggggac	tgtcaattgt	ccagcgaact	15840
tgatggtaat	tctaggagaa	aaagggaacta	atgtaatgct	gtcagcatag	aaagatgggt	15900
gccaacgagc	attccaaaaa	ggaggctctg	ttaatctggg	ttcgatcaac	aagtatttgc	15960
tgagtgtcta	ttgtgtccgg	tcagtgtcta	ggcctgagaa	tttagaagtg	aaacagaccc	16020
ggtttccacc	catgccacag	accactccac	acctggtctg	gagtgcact	ggagggccag	16080
gcaggcacag	gacagtaact	tcgatataag	gcagcaagtt	ccacgggtga	aggaggtgga	16140
aggtgcagat	gcacgtacac	acaggggttc	agggaggcct	ccctggaaga	aatgaagcct	16200
gcgaggccct	gaaggatcag	taaacagaga	ggcataaggg	gcaggagagt	aagatgatta	16260
tgctacatgt	accttattgt	gaaccaggga	ggatttggcc	tctgtcataa	aaggccccc	16320
tgtgggttca	taaacctcaa	tttacaatt	gtgctttata	tatcagttcc	ttataagttt	16380
ggttagcgta	aattggtttc	ttagaacttg	atcatccctg	agtgaactca	caaattcaag	16440
tttcagaatg	tgcaaaccta	agaaacaaac	ctcatgcttg	tggttgagac	atcgactgt	16500

caacatcaca	aattctcagc	acctgaatgc	ctggtatact	atcaacatat	attgttttaa	16560
atatgtaaat	aatagctttc	tagttataga	gagtttgtcc	ctacattttt	ccacttaatt	16620
tttacaatcc	cattcccctg	atgaaacaac	cccagcctgg	gcaacatggc	aaaatcctgc	16680
ctctacaaaa	aatacaaaaa	ttagctgggt	gtggtggcgt	gcacctgcag	tcccgggtat	16740
ttggggaggct	gaagtgggag	aatcacttga	gcccgggagg	cagaggttgc	agtgcagcaa	16800
gattgtaccg	ctgcactcca	gcctgggaga	cagagggaga	ctctgtccca	cccccccccg	16860
cctcccaaaa	gaaaagaaaa	gaaagaaaag	aaaatgaaac	caccaagact	gggagaagat	16920
aaatgacttg	tctgtggtca	tctggctaata	aagaggtaga	atggggctga	aaaagttcgg	16980
tgctcttcct	gaagaatcca	taggtcagaa	agcagcacca	tctgacctgc	agcaatagca	17040
gcaacgtgga	aagctaataca	actgacctca	aaaccactct	cagtgcaggct	ctggatggat	17100
tcagaacccc	aggcctagca	aagtgaagtt	gataaagatg	taaaggagat	cgaaaattca	17160
ccatttggag	agagatttagc	taaagactgc	aggtcggatg	gaaaattctt	tccatggttc	17220
tcccacaggt	tcttcctcca	tttggaactc	gtgtttaaaa	gtcacaaaga	ccctgagttg	17280
ggccaagggtc	tcgttcttct	tcactgtggg	ccttgacgtg	caacatggca	gggcctcggt	17340
ccaaatgtca	ctcttcagag	cctaagaaaa	caagtaactt	tagggacaca	cctgtcaacc	17400
ggagctccca	aattgtaccc	ccctaaacac	ataatgctga	gcatagaaaa	attccagctc	17460
tgcagagcgt	tatacttagg	gaaaggggtc	acagacaagg	aatgctggca	gggctcatta	17520
caaatatctt	tgctgctgga	acatgtattg	tttggtctaga	aggcgtaggc	ttctctcaga	17580
gagaaggaat	gtccaaaagt	atttcagaca	gtaagagaca	ttctctgagc	cagctacaca	17640
gctctccttc	aaaccaacgg	gtagcggcaa	gcagctgaac	tgaccagcga	gctcgcaaaa	17700
gcaagctttt	tttttttttt	ctccctaaat	aagacagcaa	gtgatgtgtc	ttggcttggt	17760
ttagcaaat	ttaagatagt	tcctgtatga	ccccaaagagc	cctcaggccc	catggaagct	17820
ggagctaattg	catcttcttc	caagcatcat	ctgctctacc	aggatctaag	ccccctcacg	17880
agggcagaag	gtataaaggc	tgactgtgtc	gggaaatgct	atggcagcaa	agacagccaa	17940
acacgccaga	aataacaggc	acatgaagga	aatgtttctg	agacagctca	aaaattccga	18000
gaagagatta	tcccgactgt	cccaggttct	cagccctgtc	tatggtatgc	agccccatac	18060
cacagtcatt	tgtcaccgag	tcctaacttt	gtcagaggcc	cctcctttca	ggtctctcag	18120
gcaccaccca	gttctggccc	tcctcacccc	cgtgagccag	gcgacatcca	agcagcccca	18180
cgggtgcacc	ggctctgtgc	tgcatctctc	gaatgtccct	gaaggccagg	gctgttgtat	18240
tctctaccca	ctctctgtct	agtatgggag	ccactggcca	gatgtgttga	ctgaacactt	18300
aagatgcagt	aagtgtgacc	aagaaaactgg	gtttgtcatt	ttatttcatt	ttagttaatt	18360
taaattttaag	tttaattagc	tacatgaggc	tatcagctgt	ggtataggac	agcagagctc	18420
cggaagcttt	tggcctgggtg	agaagaatca	ggacaagcgc	ctccctggcc	tctcgcccac	18480
tctgcacagc	cgctaaccat	tgctctcatg	acattctttc	ccagccccag	aacttttagc	18540
catgtgacat	catctattga	ttagagtcca	aactcttgt	gctaactctc	tatgggttgc	18600
cacaatttagc	cattgtatgt	cgtaaaccta	aatttcattc	atctgctatg	tcctgacctt	18660
aggggcttag	aatatagtta	gaaaacagta	tttcagaata	aaaaaccatt	cttgtattac	18720
ctctgcact	attccccctg	ttctccatgc	ttcgcatctc	ctgttctatc	cccagctata	18780
gcactgtccc	cataaagcct	actgtggttc	tcggctcatg	gtgtccttcc	tcccatctgc	18840
ctcccgacgt	catgcctgtc	ttccagtggt	tatgccttct	ccaggaagct	ttctcttggtg	18900
gcctctgctg	tgagctatag	ctcctccctt	tcaacatott	ctagcacctc	ctcttactgt	18960
gcaggtgagg	acactgaggc	ttaagggtta	agtcacttgc	tcaagggtcac	atacagtcgg	19020
tcctctgtat	ccgcgggttc	ctcatcagtg	gattcaacca	actacagaca	gaaaatacag	19080
tatttgaggg	atgctgaact	ctttgaatta	gtgggttctg	cgggtgctta	agcatccatg	19140
gattttgtta	tcctcggcaa	aggcgggggt	cctgaaacca	atcccccttg	atactgaagg	19200
aaagaccacc	cttagtgata	ggaacctagg	aacccaagtt	ccctcatttc	caaatcgtgt	19260
tccctgaccc	acttatttac	taactagtgg	tgaagccatc	ttcctgcccag	tatattttaa	19320
cttcacaatg	ggatgtgagg	gccaggatgc	acatgctttt	taaactctcc	tctgtgcttg	19380
acatacagta	gattgaaagt	aagtgtctgg	agatacactg	gccaagctgt	gctcttctct	19440
gaagtcagta	ttccaggagt	aactcacccct	ggtcactctc	gtgccctggg	cacactgggc	19500
actcccaca	cacaggttga	acctggcaaa	taagactcac	agcatcatgc	cacgtgcgag	19560
ttaaagccac	ctggagggtca	ggtcagggtc	tcctgacaac	tgagtgtctc	aaataacaca	19620
acagcagcta	agttccccac	atcaccttga	gtgtctggag	agctaggcct	atgacttctc	19680
tgtctcagga	tccctctcag	tgcccagaaa	acagtggaca	tcaataaatg	taacaccaat	19740
aacatcttgc	ttgagcgcta	tgctaagcac	atcagggtatg	ttaaactcatt	tattccccag	19800
tgtccatctc	tcagtgtttt	atacatacgg	gaactgaggc	tcaattagcc	gagcgtgggtg	19860
tcgtgtctct	gtaatcccag	ctattggggag	gcacaagaat	cactcgaacc	caggagatgg	19920
aggttgagct	gagccgagat	tgtgccacag	cactgcaaca	gagtaagact	ccgtcttaaa	19980
aaaacaaaaa	aacagaaaac	aaaacaaaac	aacactgagg	ctcagggagg	ttaagtcacc	20040

tgcccaagtt	catgagacca	aggagccggg	aagcaggaag	gggaaggcag	gagtgttaact	20100
ctgaaacctc	tgctcttagg	cactggcttt	cagctgaact	gatacctctg	gaaaacagtc	20160
tcaaaaaagt	ccacttctcc	tcccaacaat	tcagacctaa	aaaccatttg	gcggggaagg	20220
gcagggaag	cttctgagtt	ggggaggggg	tgtgggatcc	caagctgagg	tgtctgttgg	20280
caagcagggg	gcaaagggca	tctgtgcagg	gagggggctg	caagggagac	agagactgct	20340
cacaggcaag	gaatgaaata	ttaaacatta	atgttaatat	taatatattat	aattaatata	20400
tttatgatat	atagcatata	tacatattat	attaattaat	tataactata	ttaatataat	20460
taattataac	tataattaata	taatcaatta	taactatatt	aatataatcg	attataacta	20520
tattaatata	atcgattata	actatattaa	tataatcgat	tataactata	ttaatataat	20580
cgattatatt	aatattaata	taatcgatta	tattaatatt	aatataatcg	attatattaa	20640
tattaatata	atcaatatta	acaaatatat	actatataat	ataaataata	cctaagttta	20700
tataatatgc	ataatgttaa	tatttattaa	tatttcaggg	acaatgggag	tcataaatat	20760
ggagagacaa	aactagaatg	aaccccaagg	tgctgcatac	gaattgaagg	taccagtctg	20820
aactcatagt	tttcaaccta	ttgaaataaa	tatagatgca	cgtgtgtgtg	tatgcacgta	20880
catacaaatg	ttccctaatt	ctgcccattg	agaggcctgt	ggtttagcaac	accccaacag	20940
caataagcag	acctagcttg	gctcctaaat	ttcattttcc	actaaaagga	accagagccc	21000
cttggtataaa	ggactgattc	cacagggtgg	tagggagcat	ctgttgccag	aaagcaagaa	21060
agcacttaaa	gaatgatgtg	gacatgtcaa	agggacacag	aagccagcct	ggatgagatc	21120
ccactggccc	taactgtcca	caaggacaat	ttgagcaagg	atgtcaacaa	tttaagagca	21180
gattataaac	cactgaataa	aacagaaaaa	tacaaagaat	tgaaacggac	attgatggca	21240
gcaggagatat	taacataatt	ttaaagtatc	ttcccaagga	atgcttctga	atgatgaagg	21300
ggaaaagaat	aactgtacag	tggaaaagcc	tggtaaaacc	caccttagtg	accaaagtga	21360
atgtcaccat	agtgggacaa	aaggaaatca	agtgccacct	tatgggatcc	aacgaggacg	21420
cagcatccct	tgggtgatgt	tccagccaaa	tacacgtgcc	cgggtggaatc	acacaagaac	21480
atcagacaca	ctcactactga	gggacactct	gcaaactgac	agtactgggc	acaaacatgt	21540
ccagggtcatg	gtcgaccgca	gtggctcatg	cctgtaatcc	cagcattttg	ggaggctgag	21600
gtgggaggat	cacttgagggt	caggggttcg	agaccagcct	ggccaacatg	gcaacaccct	21660
attctctact	aaaaatacaa	aaattagccg	agcgtgggtg	agcatgcccg	taatcccagc	21720
tacttggggc	gctaaggcac	aagaatcgct	tgaacccggg	aggtggagggt	tcagcgcagc	21780
tgagatatca	ccgctgcact	ccagcttggg	cgacagagtg	agtttccaac	tcaaaaaata	21840
aaaaaataaa	ataaaatcca	ggccacaaga	gtcaaagaaa	gactgaggaa	ggttccagac	21900
tgcaggagag	ccaagagaca	ggataactag	atgcaatggg	cagtcctgaa	ttggatcttt	21960
tgttatgaag	gacaacgctg	ggacatatgg	tgactcttga	atgggggttag	aggactagac	22020
ggtgggaatg	catcagagtc	agtgtcccgc	gtggatggct	gtgttgcggt	tctgtgggag	22080
aatgccctgg	tctgtattcc	aagggtaatg	gagtagcagg	ttgacaaatt	actttcaaatt	22140
ggttcaaaaa	agaaagttct	tttcaactgta	cttgcaattc	ttatgtaagc	tggaaaattat	22200
ctcaaaatta	acgagaattt	tttatcgacg	tagtatttta	catattttatg	gaaaacatgt	22260
aagtatttgt	tacatgcata	aactgtgtaa	tgaccaagtc	agagtatctg	gggtatccat	22320
gaccttgagt	attaatcatt	tgtatgtgtt	gggagcatta	caagttttcg	agttaccaat	22380
tttttttttt	ttcctttgag	acagggtctt	actctgtcgc	ccaggctgga	gtgcagtggg	22440
acgaccacgg	ctcacgcagc	acagcctcca	cctcccaggc	tcaagcgatc	cttccacctc	22500
aaccacccaa	gtagctggga	ctacagggtg	gtgctgccac	ccccagctaa	tttttttaatt	22560
tttttgtaga	gacagggtct	cactatgctg	ccagggtctg	tactgaactc	ctaggctcaa	22620
gagatcctcc	cacctcggtc	tcccaaagtg	ctgggcatcat	aggcatgagc	caccataccc	22680
agccaaatth	tttaaagtta	tttttttaaat	ctccacttaa	ttcgatthttg	gtaaaacacg	22740
acctgtaatt	tttctttatc	ggtaggtaat	aaaagcttca	gatgatthtta	ctgatcactg	22800
gtatgggcat	atthcatgac	tttgcccttt	catctcttgc	atagthtttac	cctcaccaag	22860
caagaccttc	cctgcctcag	cactgtttgc	cctcttctgtg	ttttccagaa	cagaagtggc	22920
cctgtttcgt	gcccagagca	gaagagaacg	atgaagagct	ctgctctccc	aggtcttcct	22980
ggtctgtgtg	tgtccagggt	ttgagggcct	ctcacataca	cggctctgga	ccacgtaaga	23040
tctaatttta	gcattttcct	gctcggagac	cacaatgttt	ggaacagcag	gggctgacct	23100
gcccgtgcag	gcctcctatt	gtgaagggca	cgcgaagcca	ggataccgca	gccctgcagg	23160
atgtgactca	gcacctctgc	tcagtgtctg	ggcggccagc	agctctggca	ccaagtgtctg	23220
ctgctgacct	cacctcttaa	gaccacaaat	acccagggtg	attgggtggga	taggcatgca	23280
gcacagctc	tcctgtttaa	gacaacttgc	ttgtccatcc	attatgtctg	gcttctctgt	23340
gaacaccaca	ggtatcatgc	aggaagagtt	cttccgagga	actgatctgc	tggtattttc	23400
aggacaccaa	gaatcacagag	attgggtcttg	tttctctctt	tgctttgact	accaggaaac	23460
tcaaagtcag	atctgtggcc	aaattctggt	aaccatacca	atgctatgtc	atgtattaca	23520
tgtacaaacc	ttccctctac	ttcatcttat	tttcttctgc	tttcttctgt	tcccgaattt	23580

ctcactaatg	ttacattcta	ttgtttctcta	tgaatgttgt	aaggtgtttc	aaatcctttt	23640
tggagggcac	tactgtagat	acaacacaca	ttacccttga	gggataagga	ctcttttttga	23700
ctccacacag	aatccctggc	atttggcaaa	gaaccacat	ttaggcacta	aatacacatg	23760
ggctgaatgg	aaaaagccaa	tagctaagta	aaaaccacct	ccattaccat	attgtttcac	23820
aagaggttct	tttcccttcc	atctcatgag	gtggggcctg	gtcaggagtc	cccagggcct	23880
gggaattagg	ttccttaggg	agccttcttg	ctgtaggggc	agccaacagg	tcagtggcct	23940
tgactccaga	cctaaagagc	cactcctaga	ctcccagctg	caacagacac	agcgtggcac	24000
gggtgggcct	ggccactggg	gaagtgacaa	gtgatttcca	gatgctgcag	ccagcctggc	24060
tctttccaga	ccacactgaa	ggccccttcc	tgtgggaatt	ctgatggggc	ccagatttgg	24120
ggaaacacgc	ctcgaggact	cttggcaagt	gctgtccagg	cctgggaccag	gaatgacttc	24180
tgtgggcaca	gggagagacc	aggcatttcc	taacacagga	ccttgaacag	ccttctctga	24240
aacaaagtct	ttctaaaaat	agcttcaaaa	gtaaccattc	aagaaaagaa	agaaaaaaa	24300
aactgtaaaa	gtaaaaggcac	tcaagaatga	tatttcccag	ataaaagcct	ggcacagggt	24360
tcagaggaac	ttgcaggaaa	acaggtcaag	gctgggtttt	tcctcttagg	tgtcacttgg	24420
ttaacattgg	tctttggagg	ggaacaagtg	cggcaggaag	ggctggcact	gaaaatgatg	24480
gccactgggt	ataggccagg	gccagacact	gtacacagaa	caagactctc	tggaggcctc	24540
aggagggccc	tgagaggagg	aaggcagggtg	gtgggccccag	ggtcagacat	gcaagtgagc	24600
taagtggcaa	ggccgatgcc	ccatccagaa	gccccgctct	gaccacacgc	aggctctccc	24660
ggcatgtcct	catttatgcg	gcagtctctt	gtatctcact	gcaattctgc	ccccacactg	24720
caggctggcc	agcgtggcct	cctcataagc	acatcacctc	gcaccccgac	actgactaca	24780
cccacaaagg	aggagccccc	gcaccctcca	gcccaatcgc	tcagttcgct	ttgaaaatgg	24840
ctcctctcgg	gggtctggcg	cagtggctca	tgctgtaat	cccagcactt	tgggaggccg	24900
aggtggttgg	attgcttgtg	gtcagggaatt	caagaccagc	ctggccaaca	tgggtgaaacc	24960
ccatctctac	taaaaatata	aaaaattcgc	caggcatggt	ggtacaagcc	tatagtccta	25020
gctacccaag	aggctgaggc	aggagaatca	cttgaaccga	ggaggcagag	gttgcagtta	25080
gccgagatcg	tgccactgca	ctctagcctg	ggtgacggag	caagactgtc	tcaaaaaaaaa	25140
gaaaaaaaaa	aagaaaatgg	ctcctctgga	ttttgattaa	tcctattttg	attaatcctg	25200
gtttctcatt	ttcagccttc	cttgaagcag	catgacccat	ctggatgtcc	tcctcatctc	25260
aggaattttt	taataagctg	tctaaatcca	gagatccgac	cacagaacaa	tgaatgccaa	25320
agatgagttc	taaagatgcg	agtactttct	ttctaaacgg	acgctgcttt	gtgtatggct	25380
ctgctcctgg	gggcagacgc	ggcaggctaa	gccctgcgga	ggaggagggtg	agtcocagca	25440
gagggtcact	tcctctcagt	agcccggctg	gttttctcca	ctgcagggtc	agaccatagc	25500
cctgacccag	ctagaccccc	ataagcgcct	gaccttgctc	tcaccgtggg	aataaaaactc	25560
gtgatagtca	gttacaataa	cacagcaaata	gatgagcagc	acaatataaa	cacagatcta	25620
gattgggtggg	tctgaggact	cattcttaaa	tttggaggcc	atcacctaata	cttgtctttt	25680
cactttacat	agcaggagac	agggacccag	agaagtgaag	aggcgttgcc	ttaggttgca	25740
cagcagatga	cgccctctcaa	gatggaccct	aggttgtctg	actccgtctc	acagctttgc	25800
cccattttatc	atgaagatga	acgctggtaa	cactgctacc	tacgagctga	gcttgcacgc	25860
acattctctgg	tgtgtacatg	catgctgca	cgctcacgca	atgtgctaag	tgcacaggaa	25920
ggagaccaga	ggcctgaggc	gttcttttga	agtctaagta	ctgggtgttc	gaaagttaa	25980
tgaaacctac	tagactctga	gcaaaattcg	ttttacgtta	accttaatatga	aaagttaa	26040
taagtctctga	cagaattaac	tcttcacgtc	tctgtcctca	tttgtcccca	ttctagaatg	26100
agttttctaa	ttaaaaaaaaa	tatatagggc	cgggtgcagt	ggctcacgcc	tgtaatccca	26160
gcactttggg	aggccgaggc	gagtggatca	cctgaggcca	ggagtccgag	accaacctgg	26220
ccaacatggt	gaaaccccg	ctctactaaa	aatacgaaaa	attagctagg	ggtgggtggcg	26280
catgcctgta	atcccagcta	ctcgggaggc	tgaggcagga	gaatcactgg	aaccttgagg	26340
gcagaggttg	cagtgagcca	agatcgtgcc	actgactccc	agcctgggtga	cagagcaagt	26400
actcccatcc	ccccccacaa	aaaaaaagta	tatatgtgtg	tgtgtgtata	tatatatata	26460
tagctaggca	cagtggctca	tgccctggaat	cccagcactt	tgggaggccg	atgtgggcag	26520
atcacttgag	tccaggagtt	caagatcagc	ctgggcaaca	cagtgcagacc	ctgtctctac	26580
caaaaaatata	aggtgggtgtg	cacctgtggg	cccagctact	tgggaggctg	aggtgggagg	26640
accaattgag	cccaggagg	cggggctgca	gtgagctgta	atcatgccac	tgtactccag	26700
tctgggcaac	agagcaagac	tctgtctcaa	aaagaagaaa	agagagagag	agggaaaaaa	26760
aattgaaggc	aaattctgat	tttcaaatca	aacgttccaa	caaactgcag	aaataaaacc	26820
cgagttaaac	caaaaggaac	agccaaacag	cacaatgacc	ccaatgttta	aatatgcccc	26880
aatgttttaa	agtgggagtc	aatgggaggc	cactacctac	aaggccacag	gggttagggc	26940
aggactcagg	tccttgaaatc	acagcagcct	gcattcaaac	cctggctcag	gcctccacc	27000
agcctcgtgg	aactggtttc	ctaaaatgag	gagagtccct	actttgcagg	cttgtgacaa	27060
caagatgaca	gcaagtgcaa	aagttccaag	cccagagcct	gcagcctgca	gaagctggcc	27120

tcattaccac	ccggatgttc	tccgggctgc	agcacatgaa	ggggatacgt	gacaatccct	27180
gctttaagta	cagctcaggg	agttgacggg	acctgcccac	gcacatagtg	atgccgctaa	27240
tggctcacca	ggaagaatgg	actgcaaagc	ctgggtcttc	tgataaactc	cattctgtct	27300
cccagtggtg	gttctgatgc	atagggagga	ggaaaaagaca	gtgcttggat	tttgggggtga	27360
agagcacagg	ttttggagtc	aatgagacat	ggagtatgag	gggtctcagct	ctaccgttta	27420
ctactaaata	aaaacaggcc	actgacctct	ctgggggttta	gtctttctct	ccagggaatg	27480
ggaattcaaa	tgtccttaca	gggttttcac	aaagattaac	tgaaataatg	cacacaaggc	27540
aatcacagag	tggagtatgg	gtgctccctt	ttctctcctc	catccctgct	ttattttttc	27600
gcctgggcac	ttaccaacac	acgattattg	cgcttggtta	ttttattttac	tgtcttgtct	27660
cctcaacaga	atgtcagctt	ccagagcagg	aatttttatt	ttgtttgttg	ctatatcccc	27720
agcccctaaa	acagggcttg	gcacacagta	ggagctcaaa	aaatatattgt	tgaatgaata	27780
gctcacaagc	agacagatga	ggacagaggg	gtcttgagac	tgatctaaca	gcaccgatat	27840
tactaaactg	caacggaggc	aacggtggga	agaattttctc	tgtcctttgt	ttcctgaaag	27900
tccaagacca	cttttagttg	ctcaacagga	aacaatactc	aacttacaag	acctctaggg	27960
cctatccagg	gcaaaactggg	cactgtgagg	caggaggtca	ggcagccctg	tccctagggg	28020
ggctcacggg	ctagtgggca	gggccagctt	cttcatatgt	gtcagagagg	gccccgtgct	28080
tggtttaata	ctctgttggt	gccatcttga	aattcttaat	aatgtttgtt	gttgttgttt	28140
gtttgttggt	ttgagacaga	gtctcactct	gtcgcccagg	gtggaatgca	gtggtgtgat	28200
ctcagctcac	tgtaacctcc	acctcccggg	ttccagtgat	tctcctgect	cagcctccca	28260
agtagctggg	attacaggca	cgcgccacca	tactcggcta	atttttgtat	ttttagcaga	28320
gacagggttt	caccatgttg	cccaggatgg	ttctcaactc	ctgacctcaa	gtgatccgcc	28380
cgcctcggcc	tcccaaagtg	ctaggattac	aggcgtgagc	cactgagccc	agcctcttaa	28440
taatgttttt	aaaaggggct	ctcccatggt	cattttgcac	tgggcttcac	aaattacgca	28500
gccagtcctg	cattacagga	aatattttctg	tacctaaagta	catatactac	aaagcaagta	28560
ccaaacacca	aggaaacact	aaggagagaa	aaacgcctgt	gagaagaaaa	aggaagacac	28620
gaatcattcc	caacagaagc	tgttaccatg	aaggagtagc	gggcaggggg	atttgttgaa	28680
tgtctactat	gggagaaggg	gttcgcatca	tgagcacatt	taattctgac	aaccacccta	28740
caagctgtgt	actatactgg	ccatttgaaa	ctaaggcctg	cccagatca	tataatagcc	28800
taggaggtga	caaaggacag	acacaggagc	caaaccctatg	cccatccctc	cctaagtcca	28860
aaatcataga	aaaaaaaaaa	taagaatcaa	ctaggcggtg	tatttttaag	gccagcatgt	28920
tcaaggtggg	ggcaaatcca	agagacacta	agcctcagag	catgaacaag	catgtgggtg	28980
ctgagtggag	gggaccagtg	tttaccaggg	tgatgtcaga	ctctgcaagg	ctcgctcccc	29040
gtgtttctgg	tctcttccca	tgagcaccag	gcacccctta	ccatccccaa	actaggcaca	29100
tctgtaacgc	tgaatggaag	cctacttggt	tacatgtggt	ctatgttaga	ctgggggcat	29160
ccctagaaca	cacacagatt	gactggtggg	cagaattctg	ctaggtgcat	gcacccgagt	29220
gagcctttct	ctttgaatgt	gggagggacc	agagaacaag	atgggagagc	tgttccctta	29280
attaggtgtg	gctgcacatt	aaaggcggtg	agacagtcac	tccagtgata	acaatctgtc	29340
ataagacctt	acagaagcag	actctcctgt	tggccttgaa	gaagcaagca	ccacgaattc	29400
tccacagctg	caagaaaatg	aattcaggcc	aggcgtgggtg	gtcacgcct	gtaatcccag	29460
cactttggga	ggctgaggcg	ggtggatcac	ctgaagtcat	gagtttgaga	ccagcctgac	29520
caatacgggtg	aaaccccatc	tctactaaaa	atacaaaaaat	ttgcagggtg	cacctacagt	29580
cccagctact	cgggaggctg	agacaggaca	aaaatttgca	gggtacacct	acagtcccag	29640
ctactcggga	ggctgagaca	ggacaaaaat	ttgcagggtg	cacctacagt	cccagctact	29700
cgggaggctg	agacaggaga	attacttgaa	cccaggaggc	agaggctgca	gtgagccgag	29760
atcgaccac	tgactccag	cctgggcaac	agagcagaaa	aaaaaaaaaa	aaagtaaaaa	29820
aaaaaagaaa	atgaattcag	ccaagaacca	cgtgagctta	aaagaggacc	ctgggggttca	29880
gacaagacct	cagcccggc	cagcaagcct	tgtgagttcc	cgaacagaga	accagctat	29940
accgtgtcca	gattcctgac	ccatggaagc	tgtgagataa	taaacaatggc	ctgggtgctg	30000
tggctggcca	ggcatgatgg	ctcatgcctg	taatccagc	actttgggag	gccaaggcgg	30060
gcagatcacc	tgagttcagg	tgtctgagac	caacctgccc	gacatgatga	aacctgtct	30120
ctactaaaaa	tacaaaattg	gccagggtgtg	gtgggtatg	cctgtaatcc	cagatacttg	30180
ggaggctgag	gcaggagaat	cgcttgaaac	cgggaggcgg	aggttgacgc	gagctgagat	30240
tgcgccattg	cactctagcc	tgagcaacgt	gagcgaaact	ccatttcaaa	tttaaacaaa	30300
ataaacatat	attgtttaac	tgttaagtta	gtggtaactt	gtcatgcagc	aggcaatgac	30360
tgatacagta	acctatgcac	acatccatct	ccagtagcga	cacagaactt	ggatgcacgg	30420
ggtgcattgac	acctcttgcc	aggacttaac	ttgacagaca	agcaacaaag	acaataaagc	30480
ccaggctaag	atggactgcc	aagggcaggg	aggaacccca	gagtggtggac	aggtgcaaaa	30540
gtaggggtgt	tcaatgaaga	ggggaagcat	gggtctgcagg	gcaatgacat	gccaaccccc	30600
atccactctg	acactgtagg	ggaggggggtg	aaggcaaaac	cacacttcaa	aaggctgtag	30660

ggagaatggg	gtccctgggg	gacttccaag	tggagaccaa	aaggggaagg	gagtgcgga	30720
agaaaggcag	aggagtcagg	gagttcacag	tttaccactg	aaaccaaata	aaacagaaga	30780
gacaaaatcc	tgcagctcgc	tctggcccaa	acctttgcta	gggcaggcaa	tcacaaatga	30840
gcaaattata	ataattctaa	tgaccacggt	cccgcaattg	acttggaagt	gctggattaa	30900
aaaaaaaaaa	cttcactcct	gatccacacc	ctggggacaa	tattatctcc	ccagtgtcct	30960
acctagccca	caactactta	tgtctcatgc	cagactgagc	cagctcccgg	gatggcaagg	31020
gagccaggag	ctgctgccag	cagggccatc	tgtcaccaa	ttcccacagt	ctgaacggca	31080
cagcttccaa	agagggacta	cgagcggcca	gcagcagcct	gcacatgcag	aaggcagggg	31140
agagcgaggy	aaatggatct	atactgctct	gctgcaatca	tctgcatgct	gggtgtgaga	31200
tgatcagttc	ttgagacact	tcccgaagg	ccttcagaaa	tactgtctga	ggtacaacac	31260
tgcttctctc	aagtctgtat	tcttatttgc	atcttatagg	aatgtagccg	ggtaaaggag	31320
gaaggctgct	tcaagtcaaa	gggcatccat	ggtgggcgcc	ctctcaggcc	tggaccacgc	31380
acctgcagga	gtcggcccct	ttaattctcc	tctgccgtga	actaacactg	cacatcagca	31440
atactttgtg	aagaccgagc	acagcaacca	agcccactgt	ggacctgatt	ctaggcaagg	31500
aacttttttt	ttttttgaga	cagggctctt	ctgtcaccca	ggatggagtg	cagcggcaca	31560
atctcagctc	actgcagctc	cgacctcctg	ggttcaagtg	attctcttac	ctcaacctac	31620
tttgatagct	gggactacag	gcgtgcgcca	ccatgcccg	ctaatttttc	tatttttttt	31680
gcggagatgg	ggctctgcca	tgttgtgtag	gctggctcca	aactacgggg	ctcaaagcaa	31740
tccactcacc	ttggcttccc	aaagtattgg	gattacaggc	gtgagccact	ggggctgggc	31800
tagacaagga	acatcacaca	actactccac	aacctgaaa	ggtcacagtg	tcatccctgt	31860
tttataggtg	gaacaattga	gaccacaga	gctgtaagaa	cacacaaagg	taaaggaact	31920
cagccaccag	cacaggagcc	agatgccaaa	cttaggtctg	cctgactcag	aacccactg	31980
ccttccctct	acacctggct	gtttctccta	catgtctgga	atttactgca	gggtcaaagg	32040
ttcatccatt	taaactgttc	acttttatca	acttacttat	tttgagacag	agtctcgctc	32100
tgttccccag	gctggagtg	agtgcgcaa	actcggctca	ctgcaacctc	ccgggttcaa	32160
acaattctcc	tgctcagcc	tcccgagtag	ctgggattac	aggagcgcac	caccaggccg	32220
gctgattttt	gtatttttag	tagaaaaggg	gtttcaccat	ggtggccagg	ctgggtctcg	32280
actcggagc	tccagtgatc	cgtcccgcc	tggccttcca	aagtgtggg	attagagatg	32340
tgagccaccg	tgcccagcca	tttaaaactg	ttaaatgcta	cacaaaggca	gagaaatgag	32400
gccgtcacta	agggatttga	gagcagttag	ggatacaaca	agggcacaca	gacctgcatt	32460
gtaaggcggg	tgtggcacct	gtcacagata	gggatgccag	gggtccctg	ctttctctga	32520
agagagggaa	atcacaaata	tctggggcag	gcgcactttt	agctggtcat	gaggactaca	32580
gacagtgtaa	aaggaaactg	cctagggaac	gtgtgtgacg	gggggacag	gagtagtccc	32640
aatggactgg	aaaaggcaca	tccgagagg	gagggtgaaa	aggccaccaa	gcgggtgac	32700
gctggagctc	agaaaagact	gcgagacca	gaagggaagaa	gcatcaaggg	accagggggt	32760
gatatgcca	ggtagagagg	atgggtctga	ggtgttcctc	tgtgacggga	cagaagagat	32820
gtgaggacct	gaagaggcgc	caccagggaa	cttgagaaaa	agaaggcagg	tggctcggaa	32880
gacccgatcc	atgtgaccct	gcaatttatt	ggatatggat	gaatcagagc	tgactttttc	32940
gatgacccaa	aagatgaaac	tattaattaa	ggctagacgg	aggggagaaa	agagagagaa	33000
ataccctgct	acctccagtt	tttctcccta	cagcacctcc	tagagatgag	gtgatggcag	33060
ctcaccttca	ggatccattg	gaaacaaaga	gaaatctctc	cctaattctc	ctgaccccaa	33120
acagaaagca	accaactatt	ccataatttt	cttctctagg	agatattcag	agagaaggag	33180
cctgaaaatg	caaattaaca	cacggtatgt	aatgagtttc	agtcaaagct	taaaccagga	33240
cacaactttt	cttgtgtagc	gagggaaggct	aggaggcagg	atggtgtcct	gtgcctaaaa	33300
aggtgagtg	gacgtcaagg	tggctgaaga	ggggtttaaa	agggcaccta	gggggacaag	33360
cccagagccc	agcatcccac	cctaaatgag	aacacaggtc	tccaactcca	gcccagggtc	33420
tccctgtggt	cacaatgggt	ttggggacct	gctgacagtg	gcacggaagg	actctcgggt	33480
gtggtcgaaa	tgacccaaca	tcccaggagg	cacctgccac	cagttggcat	gagtcctttg	33540
tgtgtccct	ggcgctgtg	ctaattccac	ccagtggact	tggcatgct	ccctcacctg	33600
tatgtccaag	agcagtaatt	caacagtact	actaaccttg	tcccagaaa	ggcggcagag	33660
taggatcaac	ttggcattag	aggtctcgct	tcaaatacac	gatttcccaa	ttccaatctt	33720
gggcctcagc	caccaaccgg	gaaaaccccc	ctccaagggc	tgttttgaga	atatggaaag	33780
ctgccaaagc	tttatttccc	atccctttgt	aaggtccctt	gcagctccca	actagaagag	33840
aaagggacct	tttattagca	agaaaagggc	caggtgcagt	gactgtcatc	acgcctgtaa	33900
tcccagcact	ttgggagggt	gaggtgggag	gatcacttaa	gcccagaggt	ttgagaccag	33960
cctcaacaac	acagtgtgat	ctcatctctt	caaaacacat	ttaaaaaaat	tagccagggt	34020
tggtggcgca	cgctgtagt	cccagctact	tgggaggctg	aggtgggaag	atagcttggc	34080
cccaggaggt	caaggctgca	gtgag				

taatgagaaa	ggtccacata	caaattttca	tgtcactgct	atttataagt	tcttattaac	34260
tgaaaacact	atgctataag	ctattaaagg	taactaaaaa	ataaaaatag	ctctttgccc	34320
caaagacagt	ctaagtgaca	gagctcagta	ctcactcatc	aacaacagcc	ctgagagaga	34380
caagagatgg	aagagattcc	aaccccaaga	aagggctgga	ggggagccag	gggaggaggc	34440
atgggggagg	ggacctccaa	gagggagcta	ggggagggca	gatggggagg	agagcccaga	34500
agggagctgg	gggaggggaa	catgggggag	gggagcatgg	gggaggggag	ctccaagggg	34560
gagcatgggg	gaggggagat	ggggagggga	gctctaggag	ggagctgggg	gaggggagat	34620
ggggagggga	gctccaggaa	ggagctgggg	gaggggagca	ttggggaggg	gagatggggg	34680
aggggagctc	caagagtggag	ctgggggagg	ggagatgggg	aggggagctc	caggagggag	34740
ctgggggagg	ggagatgggg	aggggagctc	caggagggag	ctgggggaaa	agggcttggg	34800
gagggtagct	caatgacggg	acgtggggat	ggggagctaa	ggaggagatc	tgggagaggg	34860
gagcttgggg	aggggagatg	ggggagggga	gatgggggag	gaaagctggg	gaaggggagc	34920
tgggagaggg	aagcttgggg	agaggatcta	gggaggggag	ctgggggttg	ggagatgggg	34980
aggagaaatg	ggagaggagc	ttggggaggg	ggatctaggg	aggaaatctg	gggcaaggga	35040
gctgagggag	gggaacttgg	ggaggggatt	tagggagggg	agctggggga	aggggagctc	35100
agagagggga	cttcagggag	gggagatggg	agaggggatt	ggggagggat	ggttagggat	35160
gggatctagg	gaggggattt	gggggagggg	agcttggggg	ggggatctgg	gggaggggag	35220
tgggggaagag	agatgggggag	tggggggagg	ggaacctgga	gggagggatc	tggggaaggg	35280
gattttgggg	aggagaacag	gtggagagag	gagctggttg	ggagggcagt	tgggggcagg	35340
catctggggg	agatttgggg	ggaaggggag	ctgggcgccc	acaggagccg	ctgtgaggtg	35400
ggcaagcccc	tctttcagtt	cctcctcgag	agtcagcttc	cagacttcca	ctccaccctc	35460
ccctgcttcc	accagacag	tctgatctgc	aactcgcccc	atgactgccc	ccattgggaa	35520
tccagctgct	tctagcctgg	gaacctgac	gtgggcccctg	acctgaccaa	tcaaaaaacc	35580
caggggtgatg	gagcaaatgt	gtcctgtatc	ttgagcataa	cattaaaagt	gaggaccag	35640
cagaagtccc	ccagcgagga	cccagaaata	aggaatctct	ttgattcttg	caggctagtg	35700
tttccctacc	cacataatct	ttagaaatca	tgtgtgcccgt	aataaaaagt	agtatttccc	35760
ctcccttcac	tcaagcacac	agaaacatcg	gagaaaagct	gagcatattt	ctaccagttc	35820
tgcataatgag	tttgaccaga	acacctgct	gtcggtaatg	aatggttgac	cccaatttct	35880
gaacacatat	ttccttttcc	aattaatttt	ccttcccctc	atgagataaa	acagactatt	35940
tttttttaaa	gaacaatatt	cctgaaaattt	tatttacttt	ttttaaaact	atgaggtcag	36000
agttaaagac	tggctccttg	gtatgaagga	atacatgata	ttaataatac	aaagggctga	36060
atcttccata	aatcaacaaa	acacccaaac	aaaggcgaaa	cttaattttt	ggcaaagaaa	36120
aaacaaaaat	gtttttgggtg	tccattagtg	aatacatcag	ctgaggactg	ccatcttgga	36180
atcttttaaa	tgagcagagc	taaagatttc	tcataagcac	aattaaagca	ccctgaattg	36240
ataccttttag	ggggttgagt	atctgtttca	aatcagcaaa	gtgcttaccg	caaaaggaac	36300
accttaccaa	aagcaagatg	aaaaagttag	ggcagagtgt	catgattatt	actttttttt	36360
ttaagcagaa	gaatagtctg	caagaaaata	cataaaaatg	ctcaagttag	gccgggcaca	36420
gtagctcatg	actgtaatcc	cagtacttca	ggaggccaag	caggaagatg	tcttgaggcc	36480
aggagtccaa	gaccagcctg	ggcaacacag	caagaccttg	tctctattag	aaaataataa	36540
gttaccaaaa	aatgctcaaa	atggtaatgt	aaagggtgta	gaataatggc	aattattttc	36600
cttctttttc	aagcgttata	taatattatt	aaagtggcta	gacatatgta	tggattttta	36660
agcacttcag	ttttatgtgt	tttaggtata	atttctaaag	cactaaaaaa	ttggcatatt	36720
cttttttttt	tttttttaag	acggagtttt	gctctgtcgc	caggctggag	tgcagtggcg	36780
caatcttggc	tactctgccc	tcccgggttc	aagcgattcc	cccgcctcag	ccccccaagt	36840
agctgggact	acaagcacac	actaccacgc	ccggttaatt	ttttctgttt	tttttagtaga	36900
gacaggggtt	caccatgttg	gccaggatgg	tctcgatctc	ctgaccttgt	gateccaccg	36960
cctcagcctc	ccaaagtgtc	ggaattacag	gcgtgaccca	ccgcacccag	cccaaaattg	37020
gcatattctt	tttgaacgtt	ttccctttgg	gagaggaaaca	agagcattcc	ttacctgctt	37080
gggagaaaaga	cttaggaaca	agaattgaaa	gtctgcttac	ctgaggttta	attttcgatc	37140
ttcttcgctg	ccagcctcca	actacagaga	aagaaagaga	atatcacacc	acaggcacca	37200
ctgtcaacac	gcctcggggc	gcagtctcac	attttctacc	ccggtactgg	aaaaagataa	37260
agatatccag	gaaacctagc	tacttctaaa	cagccgtgcc	ctttcctcac	caatcccggg	37320
ctgtcccttg	gagtcatttc	cgtgggggaa	ttttcagggt	tccaaatgtt	gaccacatt	37380
cctgccgcag	tccaggggat	ggagtcctgt	tagctcaaca	tttcttatct	gggtgtgtta	37440
cccagcacgg	tcttttagcc	ctcagccctc	aactttccga	ggttgttctg	gaccttatcc	37500
tgtttttctc	ttttaagggg	aggggggtcat	gtttaaagag	aatccacttc	ctccgcagag	37560
ccaggcaata	acagctgagt	gatgaacacc	attttcaaaa	aaccaaccca	ggcaagactt	37620
gcacagtgga	aggtggccag	gaatcaggcc	gtctgtttgt	gggtcttgaa	agctcttgat	37680
ggttctcgaa	aagacttaaa	catttgatac	gaaacatcct	aggctatcgg	tttatttata	37740

taaatgcaag	aaagagatat	ttaatatTTTT	ctgaaatcta	aaaggccacg	agtttgggct	37800
ccagaagtac	ctatgactta	TTTTTatttt	TTTTctttca	gagagcaaac	tgaaaataag	37860
aaggaaacac	atacacaccc	cccaaacaac	tccgcaccgc	tgggacttgg	catgtttttt	37920
atgttgcaca	gaggcgccca	ttgaatggga	aagagaaacc	tggaaagctg	tgatggctgg	37980
gagagatgca	gggctgatcg	aggacagaaa	tgaggcagga	gccaaaggcg	aaggaaaaag	38040
ggtccagaga	taatgtaggg	aggggcctgg	gcagcaaggg	acacccacca	ggaggtggca	38100
acttcaacca	agaatgagta	caccagcccc	gcgcagtggc	tcacacctgg	aatcccagca	38160
ctgcaggagg	ccgaggtggg	cggatcacct	gaggtcagga	gttcgagacc	agcctagcca	38220
acaaggtgac	acgctgtctc	tactaaaaat	acaaaaatta	gccaggcacg	gtgacatgta	38280
cctgtaatcc	cagctacctg	ggaggctgag	gcaggagaat	cacttgaacc	caggaggcgg	38340
aggttgcagt	gagccgagat	tgcaccactg	cactccagcc	tggtgaaaga	gcaatacttc	38400
gtttcaaaaa	aaaaaaaaaa	gcgtacacca	gagggcctgg	gagtcacctac	atcatattaa	38460
gatgaagtac	atacaagatt	ctgcagaggc	acctacccca	cactgaagga	gaagtggaaa	38520
gagcagggaa	ggcttcaatg	accacaaaaa	aagtcacaag	agcaacaaat	tgacaaagag	38580
tatgttgggg	tctaaccagg	tggttctcaa	tgcgagacaa	gttctctcaa	caggagacat	38640
tggaagatgt	ctggaggcat	ttttctggag	gtcactactg	gcacctagtg	ggtagaggac	38700
aggatcccac	aacacacagg	atgggtcccc	cacaagagag	aatgttctgg	tccaagtat	38760
caacagtggg	ttgagaaaact	ctgggtccaat	ccaaaaaagt	gcctggagat	ctgcccatga	38820
aaattagtca	ctttgaatgt	ttctcagaaa	taacaatgtt	atgatccatt	cctgaaaatt	38880
attgatttat	ctattcttgt	gctctgcctg	ttcacacaaa	ggaactgaga	taagattcac	38940
aggaaaatga	cataagtgac	ataatcaaaa	actgggaaaa	aaagaaaatt	aaaagagaaa	39000
agagagcctt	aggactgagg	gctgtgatcc	cccgtttccc	acgccggcag	caggcctggc	39060
tgtgtcagga	aagcactgcc	ctaagtgtct	gactcattat	gaagttgcaa	tttgaagagt	39120
gatgacgtga	cttgggggta	cggacttcac	aatcatttaa	ctctcggtca	ctctctgagg	39180
ttctcagatg	aaaggccatc	tcaggtcagt	tattccaggg	aaactacatc	tgccaaggaa	39240
cacatgaaaag	aggtaatcca	gtccttttag	atgagccagg	gccacacac	aggaagcaac	39300
tcaagcgagg	gcggaccagg	gcagaaccgg	cctggcctag	gtctcctgac	cccatacaca	39360
cttgctgtct	ccatcccacc	ttgctttctc	cctcaacaca	tctgaacgag	ggccttgccct	39420
tcgggaaaac	tcccagcgca	ttcaaagcca	agcaatgaat	gctgcagctt	tgctatgatc	39480
aaataaaaagc	tggctgagtt	ttactttatg	tttatcaggg	tgcttggcac	ttggtaaaaa	39540
taatgcttta	tataataatt	gaaaaatgtat	ctagtagaca	caacacaaat	gtccaacaaa	39600
atgtggtaca	tccatacaat	ggagtattat	acagccatga	aaaggaatga	agtactgcca	39660
catgctacaa	tatgcatgaa	ctttgaaaac	gtgatgctga	gtcaaagaag	ccagacacaa	39720
aaggccacac	aggggtgtgat	tccatttata	taaaatgtcc	agaataagca	aatccataga	39780
tacagaaaagt	agattagtgg	ttgcctaagg	ttagggagaa	tggggcaggg	ggaggctgca	39840
ggtgagggct	aacgggtaca	gggttcctat	tttggggagg	atgaaaatgt	tctggaatta	39900
gatggtggtg	gttgcacaaat	ctcatgtata	tactaaaaac	cactgaattg	tacactttta	39960
aatggcaaat	ttatggtagt	taactaaaaa	ataataagac	cttaaaatgc	gtaagacaag	40020
aacagatttag	gttgcaagta	actctaggaa	ctgggggttt	tgaatcagaa	atctgggctg	40080
acaggttcag	cctgaagcca	acctctcccc	ttacctcaca	taaacttttg	tgatgagaaa	40140
ctgagattaa	gtgcataaat	tgccagacag	cagtgaaccg	aacagaaaaa	agccctcctc	40200
cgctgtggga	aggaaaggcg	ctcctgcaac	ctaacttctc	agtagcaggc	tattgatcgc	40260
cagtgttctt	ttgcctctaa	tcagcgtgta	gagggggatt	actagaacct	tctgtgtata	40320
gataactcat	gaatggcctc	tctctcccaa	ggagggggct	gtgaaggttc	aacttcccag	40380
ccactctgaa	aatgtccctg	ccaatcccag	caaaacaagg	ctgaagaact	accctaccag	40440
gagacagggc	tgtaagcca	aatgcaaaca	ttattctctt	gtctctctca	gacacacaaa	40500
cctccccgt	gttatcagtc	aacttcccc	actccctccc	acaaagaaag	gggctgaaga	40560
gccagatgc	tgctgcgga	acttccctgg	cctgggaccg	cagggccgct	cctccagtct	40620
tctctaaaca	cagctaaggg	tctgcaggcg	gacactcagc	cttgttatag	gtaagagttt	40680
agaccagagg	ccttgacggg	ttcttcaaga	gatggtgggc	aagattgcgc	gaccagaggg	40740
tcacccctgc	agctacagag	ggctgacctg	ctcagaggcc	caaggcccca	gcctaggaca	40800
agccaggcca	accctgcagg	ctaagagggc	aacagtgcc	tcaatcaacc	ccagaggaaa	40860
aagtggccag	gcaaacggac	ctgggccaca	cacagaccca	caaaaacgcg	cacagtgcca	40920
ggacacgcaa	cccaggaatg	cacctatgca	atcacccaga	atgggtcaca	gccacacaga	40980
aagatagatg	cacataaact	cacaggcctg	agtgatgtta	cagaaaaggaa	aagccagact	41040
aaggctgcac	gcacagacgt	gaaacacagc	cacacagagc	ccacagcacg	ctcggtcacc	41100
gtcacacagt	gacacgggca	cgccctacaga	cagaactcca	gaggcggcag	gcggggaaac	41160
aatctcacac	gtttgtaggg	gcactcccag	atgcctgtct	cacgctggca	cagtcctcgg	41220
tacggcaggt	cagcaacagt	cacatctcac	atcgcacagc	caggcataca	ggcaaagggc	41280



ctagaactac	cccggccaca	ggtctcagaa	ccagcggctc	acgcagtcac	ccaatcaagg	41340
gtcccagttg	cacatccagt	ccccctgga	ccctgggtcac	actgcagagt	cactcacaaa	41400
tgggagtcce	gacagacgca	cagtccctccc	cagacagagg	tcaacccaag	atgggggtca	41460
cacctgaaat	cacagtcccc	acacaatcac	gaggtcacat	ctgcacacac	agtctctgca	41520
cagtcaccct	taggggtcac	aacgcacaca	gtctccgcct	aacaggggtc	accccaagat	41580
gggggtaacc	ccctgatgtg	ggtcacagcg	cacacacagt	atcctgcaga	cactcccaga	41640
gggggtcgac	tgcatacaca	gtccctgcaa	agtcgcccc	cgataggggt	cacaccgcac	41700
acaaagtccc	cgcacagctc	cccaagacag	ggtcacatcg	cacacagtc	tgcacgggtc	41760
accccggtcc	ggctgcccgg	ctctgttcct	acggcggggc	cccaggaggc	ccgcgcagcc	41820
gccccctgc	cccgacgcgc	cggccccagc	tccggcggcc	tcggcgcggc	gtccggcggc	41880
ccaggccggg	cgcggcgagc	cgggggtc	cctcgctgtt	gctggccgag	gaggaggcgg	41940
cgtgggcgt	gggcgagcgc	tgcagggtca	ccagggccat	ggctgcggcg	cgggtgcgag	42000
gcgccacaga	cgtctcgagc	tagagccgcc	accgccaccg	ccgcccgggc	cgggcccggg	42060
gcctcctgga	gcccgcgcgc	ggcgcccg	ccgagccggg	ccgggcccgc	ccctccccct	42120
cggcgctcgcc	accgcccccg	ccccagctc	ccgcctcccg	cgccggcgcg	cgcaggcctc	42180
agtgcgcgga	gtgggcgggg	aagcgggcag	ggcgggacga	ggaggcgcgc	gtgcgcgggg	42240
gccctgaggg	ctgcccagag	cctcggctgg	tcgatcacgt	ccctcgcgcg	cccagacacac	42300
gcgccccgc	ccgcgcgcgc	cgtatcagg	cctgggactc	gggggcgcgc	gcgcgcgccg	42360
gagcccgtac	gccccagggg	ccctgcccgc	tgtctgtcct	ggggaaactg	agggccggcg	42420
accgtgcaga	caggactgta	cagcgaccag	gaaataaaag	acgtcctggg	gccgggcgcg	42480
gtgggtcacg	cctgtaatcc	cagcactttg	ggaggtcgag	gcgggcggat	tacgaggtca	42540
agagatcgag	accatcctgg	ccaacatggt	gaaaccccg	ctctactaaa	aagacaaaaa	42600
ttagctgggc	gcagtgggtc	gcgcctgtag	tcccagctac	tcgggagggt	gaggcaagag	42660
aatcgcttga	atctgggagg	cggaggttgc	aatgagctga	gatcgcgcca	ctgcactcca	42720
gcctgggcga	cagagcgaga	ctcgggtctc	aaaaaacaaa	aaacaaaaaa	caaaaacagt	42780
aagcaaaata	gattcgccctg	atcttgacga	ggttaatcaa	gttattaggc	acgtttttta	42840
aaaagtattt	tgctaattctt	tttcaatgaa	ttctttctgg	gtgttctgaa	accagcccaa	42900
ctccttggag	gtcagggaag	gcttcccaga	agagctttat	tctgaggctt	gggcttgagc	42960
ataagcagga	ttaacaggtg	aaagaacaga	gagacagctc	tccaagcagg	ggggatcagc	43020
gtgcctgaa	gcaggaagaa	gtttgtcaac	cggaggccag	cactcaggga	aggggaagag	43080
ggaggaatgg	ctggagtcct	catcctctct	ggaaaagatc	ctccggctgc	tgcgtggatg	43140
agggaccacg	gggcagaggg	ctgagggaga	ccagggagga	ggctgctgct	gttgtcccgg	43200
ggagaggtga	ccagttatgg	ggatggagag	gggaacatgg	aataagatac	caagaaggca	43260
attctggctt	gacttagtag	taggaaactt	ttcttttagc	caaaatctca	tctcccggct	43320
cccaccccc	acctctgcat	gttgacaaag	cactcgcaaa	cgcagtgggt	ccagcctgcc	43380
ccgcagctta	gcaaatttgt	cttactgccc	aacaggaaac	ccacgcagcc	tcctggattc	43440
ttccccgtcc	ctccctctgt	cctggggctg	tgacctcctc	catgttattc	acaggggtctc	43500
agcagatcc	atctcaaagg	tgattctagt	ggggggcact	gtagcttcta	cggagcgttt	43560
ctaagagggg	atgttgagg	atgtttgtgg	ttgtcttctg	gatggagggg	gagagctcct	43620
ggcattttaga	gtgcaagagc	cttggatgct	aaatgtcttc	caatgcactg	gacagtctcc	43680
ccaacaagaa	ttgtctccatt	cccacaaaat	gtttcctggg	tgaaaaaacc	atztatagta	43740
atgtgaagcc	agaacctaac	tccatttcat	gcatcaacac	tagtcttctc	tccttctctc	43800
cttccttctc	tccttctctc	ctgccttctc	tccttctctc	ctctcttctc	ctcacttttt	43860
ttctgaaaca	gggtctcact	cccgctcacc	aggctgaagt	gcaatgtcac	aatcatagct	43920
cactgcagcc	tccatctccc	aggctcaaat	catcctcctg	cttcagctctc	ctgagtacaa	43980
cgggtacaca	ccaccacacc	cagctccttt	aaaaaaaaag	tttaactatg	ttgcccaggc	44040
aatcctcctg	cttccgcctt	ccaaagtgtc	gggattacag	acagaagcca	ccatggctag	44100
cctggatattt	tttactgaat	tttcagaaag	gtgactatgt	tgaaaccctg	tctctcctaa	44160
aaatacaaaa	aattagccag	gcattggtgg	gggcacctat	aatctcagct	actcaggagg	44220
ctgaggcagg	agaatcactt	gaacccggga	ggcagaggtt	gcagcaatct	gagatcgtgc	44280
cactgcactc	cagcctgtgt	gacacagcaa	gacagagaga	aagagagaag	ggaagggagg	44340
ggaggggagg	ggagaggagg	ggagaggagg	ggagaggagg	ggaggggaga	ggaggggagg	44400
ggagaggagg	ggaggggagg	ggaggggaga	ggaggggaga	ggaggggagg	ggagaggagg	44460
ggaggggaga	ggaggggagg	ggaggggagg	ggacgggaga	ggaggggagg	ggaggggaaag	44520
gaagggaaaa	tacactttgt	tttgcttgag	agttttgtca	agagttgttc	atccatcctt	44580
agggaaaaag	aggtaatgga	tggcaacg	ctgctaata	ttagagcatc	ccacacaagg	44640
tgcccaaac	tgtagctgca	ctctaggtag	acagacagtc	ataggtactt	aaatgtcaaa	44700
tataagggaa	aattgtggac	aaaattcagt	tgagtagaga	atattttatt	tctcaaatcc	44760
aagcacattg	attattggca	ggcccatgct	tctgagatgc	ccctgtgtcc	tctmagggag	44820

tagtggctga	gcatttccac	attgtaatgc	atgttgtttc	attatgattt	atTTTTcttt	44880
tatgtctctc	ttacattagt	tttcaaattt	gagagtttga	gaatcccctg	gagaaaatac	44940
agattgctag	accccacctc	ccagagtttc	gaattcacaa	ggtttgctgt	agggctggaa	45000
aatttgcacg	tctaacaaat	tcacaggcaa	tgctgatgct	tctgtctggg	gacgacagtc	45060
tgagaactac	tgctataaca	aatgcaatgg	cctcttcacc	aagaaaattcc	tacctagatc	45120
tgatcctggg	acccgtccgt	ggcccccaat	cctaattcccc	ctgctctggc	cggcctgctt	45180
ttccactcac	cccaactttt	ttggaggcag	tctccacccc	ttctcacttc	ctcttagagc	45240
tgagagccct	tttcttcccc	acaactaact	cttgctagaa	atcacctcca	aaaagctttc	45300
cctgcccctt	aagcagtgtc	atttccagga	tctcgtagcc	ctcaccttac	ccttaaacac	45360
acagcaagtg	tcagtctgcc	ttatcataat	gggtccatct	ctctgtcttg	tcccattacc	45420
gtagagccag	gaacgggtccc	taagaaaagc	ctcaggaatc	aggctgggac	cagcgtgagg	45480
gtgcaaaatg	taagaggggtg	cccccaaaaa	ctcaatgatt	aagataaata	gtattttaat	45540
gcaatattttt	agaaaatcaa	aattaatgcc	aaatccatga	tgaataaaat	atTTTTaaaa	45600
tttgcTTTTT	TTTTTTTTTT	ttaattgaga	cagagtcttg	ctctgttgcc	caggctggag	45660
tgcagtgtgg	cacaatctct	gcctcttggg	ttcaagcagt	tctcctgcct	cagcctcccg	45720
agtagctggg	attacagacc	cccaccacca	tgaccggcta	atTTTTgtat	ttttagtaga	45780
gatgggggtt	caccatgttg	gccaggctgg	tctcaaattc	ctgaaatcag	tgatctgcct	45840
gcctcggcct	cccaaaatgc	tgggattaca	ggtgtgagcc	actgcacctg	gtcaaaatat	45900
ttacaaaaat	TTTTtaagag	ccaaggtctc	attctgtcac	ccaggactgg	gtgtagtggg	45960
gcaatcctag	ctcacttcag	ccttgaactc	tgggctcaag	ccatcctcct	gcctctgcct	46020
ccggagtacc	tgagactaca	ggtgtacacc	accacgcctg	gctgacttta	TTTTtgccag	46080
aaactgggtg	tgtctatgtt	gccaggctg	gtttcaaaact	cctggaggca	ctcaatcccc	46140
cgaccttggc	ctcccaaagc	tttgggatta	ccggcatgag	ccaccacacc	tggccaaagt	46200
atcaaatTTT	taagtaaaat	tggcatcagt	attgtgtcac	tgattcttcc	acttacttca	46260
gacttcagtg	tagctcagca	aagcactttt	attgatcctg	tctttatttg	attcttttac	46320
aactttggcc	attctaaagc	cttttgtgaa	aatggcctgt	ggttcagctg	ggcatgggtg	46380
cgtgcacctg	taatcccagc	tactcgggag	gctgtggcag	gagaatcgcc	tgaaaccagg	46440
aggtggaggc	tgcaagtggg	tgagatcgtg	ccacttttga	cactctgtct	caaaaaaaaa	46500
aaaaaaaaaa	aaaaaggaag	cctgtcggct	tgactccagt	agcctctgat	ggggtggagt	46560
ggacaagggg	aagtgaagc	tcccaggcct	cagtcagggc	aggtcccaag	aagccctgag	46620
catggaggag	gggaacaatc	cagtagaggc	agctctgaag	ttttctccca	tgcattagag	46680
ccctttccaa	tcagtatcat	gatttttcat	catataatag	tttatttaat	catctttgac	46740
ctcctccttg	tagtcccagc	tcacttttgt	aactaataaa	aaacagtgag	ttattgagct	46800
atttgcctct	tgctaaggca	caatgcaaag	tgctttgtga	gtgtgtgggg	gacatgattt	46860
attaacatgt	gactgtcccc	ccacttatac	tccaagatca	cctcctccag	gaagccttcc	46920
ttgccccgtg	gctggggttag	gcaccccttc	tctgtgtctc	tacagccctc	gtgcattagt	46980
gacaatggca	ttgtggatct	gccctaggcc	catttctggg	ttgggacact	ttaggtacat	47040
tcattcttgt	caccctgtga	ttctcatttc	atgggtgagg	aaattgatgc	acagagtggg	47100
taaggcactg	gcccgaagtt	atgtaactaa	ggagtgggtg	acctggttca	cccatgtttt	47160
tctgctttag	aactcaggca	aagacagggt	cttccaggac	agcctcagaa	agtgttgggtg	47220
caaattaggt	tgggtgaaaa	gtaattgcgg	tttttgtcat	tttttttttt	tttaatgggtg	47280
caaaagtaat	tgcggttttg	tcattaatga	ccaactatta	taagtaatag	ttcccttttt	47340
tttttttttt	gagatggaat	cttgcctctg	tgcccaggct	ggagtgcagt	ggcttgatct	47400
tggtctctctg	caaactccgc	ttcctggggt	caagtgattc	tcctgcctca	gcctcccaag	47460
tagctgggat	tacagggtgc	cacccccatg	cccagctaat	ttttgtattt	ttagtagaaa	47520
cgggggtttca	ccatgttggc	caggctgggtc	ccgaactcct	gacctcaagt	gatccaccca	47580
cctcggcctc	cccaaagtgc	tgggattaca	ggtgtgagcc	actgcacctg	gccagtagtt	47640
tgctctgttaa	agcaataaac	ttgtaatttc	tccttaatta	ttcattccaa	aatgatattc	47700
agaggtaata	aagctctgat	aggctgaata	atggcctgca	aagatgtcca	tattccaaat	47760
ccctagaatc	cctgcctatg	ttaccttgca	tgctaagagg	gttttacaga	tgtgattaaa	47820
ctcaggatgt	ttagatgggg	aaattttcct	ggaggaggcc	caagagggtc	taatgtaatc	47880
acaaggggtcc	ttataagagg	gaggtgagaa	ggtcagagtc	agtagtaaga	gatgtgacaa	47940
cggaaactgag	ggattagagt	gaaggaagag	gccacaatcc	aaggaaatgca	ggcagttgct	48000
aaaagtggaa	aaacacccaaa	aaatgaattc	tcctttcaga	gcctccagaa	agaatggagc	48060
cctgctgata	tctttttctt	ttcttttttg	agttagggtc	ttgctcacag	agctgtcacc	48120
caggctggag	tgcatgggca	tcacatagc	tcacagcagc	ctcgacctcc	agggctcaag	48180
ggattctctcc	acctcagcct	cctgagtagc	tgcgactaca	gacacacacc	actatgcccg	48240
gttgactttt	tttaattatt	attatacttt	aagttctggg	gtacatgtgc	agaatgtgca	48300
ggcttgttac	ataggtatac	acgtgccatg	gtggtttgc	gcacccatca	acccgtcatc	48360

tgcatatgat	atttctccta	atgttatccc	ccccctggcc	caccaccccc	tgactggccc	48420
cgggtgtgtga	tgttccccc	gcccgggtga	tttttaaggg	ttttgtttgt	ttgtttgttt	48480
tttttagagac	gaggggtctca	gctgggtgca	gtgggtcatg	cctgtaattc	cagcactttg	48540
ggagggtaagg	cgggcagatt	gcttcagccc	aggagttcaa	gaccagcctg	ggcaacatgg	48600
cgaaacaaaa	aaatgcaaaa	aattaactgg	gcatgggtggc	acatgcctga	ggctgaggtg	48660
ggagtatcgt	ctgagcctgg	gagatcaagg	ctgcagtggg	ccatgatcat	gccactgtgc	48720
tccagcctgg	ttgatgggg	gagaccctgt	gtctaaaaaa	taaaagaaat	gaaggtcttg	48780
ctgtgtttcc	taggctgttc	ttgaactcct	aggctcaagc	aatcctcctg	cctcagccac	48840
cccagttgct	tggtattacag	gcacaagcca	ccatgtccaa	tcctggcaac	gtcttgattt	48900
tagactttctg	atctctacaa	ttgcaagaga	ataaatttat	gttgttttaa	gccacgaaat	48960
ctctgggaat	ttgttacagc	agccatacga	aatgaatata	aaactcaacc	tccatttggg	49020
ctttaaaaaa	catatcatta	taatgccatt	accagtgata	ttccaggtgc	ttcccaagcg	49080
ttgtgtcatt	ttctcattca	ctcaactcat	ccaataaaact	atgtttgttg	ctctcctggg	49140
cactagtcta	ggaatctggg	ttccatcagt	gaacaaaatg	gaatcactgc	ccttgaagag	49200
cattcaatca	agtgggaaat	atagtaaaaa	tatatatata	tgcaaatatg	tttaaaatca	49260
tatgtggtaa	atatattgca	tttaaatgaa	ttaataggcc	gggcacgggtg	gctcatgcct	49320
gtaatcccag	cactttggga	ggccgaggcc	agtggatcac	ttgaggccag	gagttcgaga	49380
ccagcctggc	caacatggcg	aaaccccgtc	tctactaaaa	gtacaaaaat	tagccagttg	49440
tggtgggtggg	tgccgtgtaat	cccaggtact	cgggaggctg	aggcacaaaa	atcgcttgaa	49500
ctgagggggg	gcgagggttg	cagtgaagcc	agatcatgcc	actgcactcc	agcctgggtg	49560
acagagtgag	actgtctcaa	aataataata	ataaataata	attaaatgaa	ttaatatggg	49620
taagggtcct	tagaacaaga	taggcactga	tatgtgtcaa	ataaatgaaa	tatgatgtcc	49680
aatcatgaaa	aagcttggga	gaaaaacaaa	gcaggctaag	ggcagagtaa	tggaggaggc	49740
cacttagaca	aatggtcagg	gaagcttctg	ggtgaggtga	tatttgagca	gaggaatcac	49800
catgacagca	ccaccaggga	ggtgtagaaa	ccctgggatc	tgccctggttc	attcaaactg	49860
gcctccccac	taaggaactg	tgaggtactt	tttctgagac	ccatttttctt	tctgtctgtg	49920
tcacccaggc	tgtagcgagc	tggcgcgatc	tcggctcact	gcaacctcct	ccccccaggc	49980
tcaagtgatc	ctcccacctc	agcctcctga	gtagctagga	ttacagggtgt	gtgccaccat	50040
accagctaa	tttttgtatt	tttagtagag	tcggcggttc	accatgttgg	ccaggccagg	50100
ctgccacctt	ggcttctctac	agtgtctggga	ttacagggtgt	gagccttcag	accagccga	50160
gacccactgt	ctttctctgt	aaaattgata	tgaaagtgat	agtgtctcgc	cgggcatagt	50220
ggctcacgcc	tgtaatccca	gcactttggg	aggccaaggt	gggcagataa	cctgaggtca	50280
ggagtccaag	accagcctgt	ccaagacggg	gaaacctgt	ctctactgaa	aatacaaaaa	50340
ttagccaggt	gtggtggtgg	gtgcctataa	tctcagctac	tcaggaggct	gaggcaggag	50400
aatcgcttga	accaggaag	cagaggttac	agtgaatcga	ggtcccgcga	cttcaactca	50460
gcctggacaa	caaagcaaga	ctccatctca	aaaaaaaaaa	aaaaaaagaa	agaaaaagaa	50520
agaaagtgg	agtgtgacc	tcagagcttg	gttgtgtcaa	ttgaacagca	tactatgcag	50580
gaaaggcaga	gcgtgtgttc	ctattttacta	atagtagcta	aggtattggg	ttgaattgtg	50640
tcccacaaaa	attcactagt	ccctgtgaat	gggaccttat	ttggaaatga	ggtccttgca	50700
gctgatcaag	ttaagatgag	gtcattaggg	cggggcccta	ttcgcatatg	actgtgtccg	50760
tatgaaaagg	gggaaatttg	ctgggcgcgg	tagctcatgc	ctataatccc	agcacttttg	50820
gagaccaagg	cgggtggatc	acctgaggtc	aggagtctga	gaccagcctg	acaaacatgg	50880
agaaaccctg	tctctattac	aaatacaaaa	ttagccaggc	gtggtggtgc	atgtctgtaa	50940
tcccagctac	ttcggaggct	gaggcaggag	aatcacttga	acccgggggg	tggaggttgc	51000
agtgaactga	gattgcgcca	ttgcactcca	gcctgggcaa	caagagcgaa	actgcatctc	51060
aaaaaataaa	caaacaaaca	aataaataaa	taaataataa	aaggggaaat	ttggaccagg	51120
agccaagggg	aaaatgcttc	ctgaagggtg	tagttgtgct	gccacaagcc	aaagagcacc	51180
cgagatgggc	agcaaaaccac	cagagctagg	agtgagaagt	gaggagcaga	tttgcgtggc	51240
cttctgaaga	aaccagcaac	tcgattttcag	agttccaggc	tccagaactg	agagagttaa	51300
tgctgtggt	ttaagcctcc	cagtttgtgg	cactttgtta	cagcagccac	aggaaaggaa	51360
cgcattcaac	atgatcattt	catcagctgc	agaaaatgag	gctcagagca	aggctagggg	51420
ttgaacccag	gccaactaga	ccccagacca	catacatggg	ttgttggcct	ttctagcctg	51480
ggaggtgaca	gtttggatgt	tcactatttt	gcagggaacg	gtgttcagag	gactcaaagc	51540
ttctgccacc	tgggccaggg	tgtccaggtg	tagatatgga	agtcagggtat	ctggggcttc	51600
tgacaaaagca	tctctctggg	tgggtcaata	ggcaccagca	gccaggcagt	tgagggatct	51660
ctgcccctgt	gcggaggttg	ctgaagcctc	ccttctctta	cccatccctt	catttaacct	51720
gcttgccaga	tcaagggtgt	ccctggcctc	ttccaggggt	gtattcacct	gaatttgctt	51780
tttattcact	atgatcacaa	gcaacacact	gacccttgct	gggcctcaga	atctcaactc	51840
ttggtgggg	gcgggtggcc	atgctggtaa	tcccagcact	gggaggccaa	ggtgggtgaa	51900

tcacttgagg	ccacgagtta	gagaccagcc	tggccaacat	ggcaaaaacc	tgtctctact	51960
aaaaatacaa	aaattagcca	ggcatgggtg	catgcacctg	tagtcccagc	tactcaggag	52020
gctgatgcac	agaatcact	tgaatccagg	agatggagg	tgcaatgagc	caagatcaca	52080
ccactgcact	ccagcctggg	tgacggagtg	agactctgtc	tcaaaaaaca	aacaaaagaa	52140
tctcaactct	taatattggaa	tgattaatgt	cctataagaa	agcattgggt	agatcaattg	52200
ggatatatgca	tgtgatatcc	ctcctagata	gctctcagtg	gtcctcatct	cctgatattc	52260
atgccctgtg	gagtctcttc	acacaataca	tagaactgac	ctgtgtaacc	actaggatat	52320
cacagatact	acagcatgtg	gcttctgagg	ctaggggtca	taaaagacac	tgaagctgct	52380
gtcttgctgt	ctcttggtatt	tctcattctg	ggggaatcca	gctaccatgt	catggggaca	52440
tttaggacat	ttaagcagcc	aaagagagag	ggcgcgatgg	caagaaactg	aggtctcctg	52500
ccaatgacca	gcactaacct	attgtcatgt	gaatgcacca	ccttgaaaat	ggatcctcca	52560
gccccagtc	ggcctttatt	tatttattta	cttattaatt	gagaccgggt	ctcattctgt	52620
ctcccagggt	ggagtacagt	ggcaccatct	tggctcgctg	taacctctgc	ctcctggggt	52680
caagcgattc	tcattcttca	gcctcccgag	tagctgggat	tacaggcggtg	cgctaccatg	52740
cccagctagt	ttttttgtat	tttttagtaga	gacagggttt	cgccatgttg	cccaggctgg	52800
tctcaaactc	ctggcctcca	gtgatctgcc	tatctcggac	ccccaaagtg	ctgagattac	52860
aggcaagagc	cattgtgcc	ggccccccat	tcaagccttc	agatgagatc	acagccatgg	52920
ccaacatctg	gagtgcaccc	tcattgagaca	ctctgagcca	gagctgcccc	gctgagctgc	52980
ttccagattc	caggcccaaa	gaaaatgtat	gagataataa	atgtttattg	ttttaagctg	53040
ctaaatttta	aggtaacttg	ttatgcagca	atagataact	tttatatgct	gccataaaaa	53100
tattataaaa	ccatgcacta	gtacagaaa	attttataa	aatattaagt	ggaagaaaag	53160
aaaagcaggc	caccaaacag	cgtaggacag	tagaccccat	ttttgaaaga	aaaatgtgaa	53220
gagttaaaaa	actctacca	aaggggaaaa	aaaagagggc	atcaatggag	agatggagaa	53280
gctttgtttt	tggatgggaa	gactcagtat	ggtagagtta	acaacctctc	gaaattaaat	53340
taaatggaaa	tgctattgaa	atcccaactt	gattcttttg	agtgtaggga	tctttacaac	53400
agataactgg	acaagctaac	atttattggg	tatatatgtg	cgttgcacat	cgtgacagtc	53460
actgtttcat	cttaattcca	ccataggaga	aagtccctct	ttattttaatt	tttctgagag	53520
taaagtactg	ctattacctg	ttcccccttc	cattttactt	aggaggtttc	aagagggggac	53580
ttgtctgaga	tcctggaaac	cgtggagggtg	agatgacatc	aagcatgttt	gatattttaca	53640
tgtgtgccct	tgggctctct	gccacatggc	ctccccactg	tgccctgggt	tccttaagta	53700
ccagcccaag	gacacatgga	taggaaagg	ggagctgggg	caccagccca	gtctgcctga	53760
ctccagagtc	cctgggtctta	atcactaaac	caccccgaga	aagtaaccgt	gggagaagag	53820
acctgcaaac	taggaaaaag	aagattaaag	ggaaggaatc	tggtctgcta	gatattaaaa	53880
catatgacaa	agctgtagaa	attaaaacag	aatggggccg	ggtgcagcag	cttatgcctg	53940
taatcccagc	actttgggag	gccaagggtga	gtggatcacc	tgaggtcagg	agttctagat	54000
cagtgtgacc	aatatggtaa	aaccctgtct	ctactaaaag	tataaaaaat	agctgggcat	54060
agtgggtgtg	acctgtagtc	ccagctactc	tgcaggctga	gccaggagaa	ttacttgaac	54120
ctgggaggga	gaggttgacg	tgagccaagc	tcacactact	acactccagc	ctgggctaca	54180
gagcgagact	ccagttcaca	aaaaaaaaaa	aagaaaagaa	aaaaaagaag	aagaaaaaaa	54240
aaaacggggc	gcagtggtct	atgcctgtaa	tcccagcact	ttgggaggcc	gaggtgggtg	54300
gatcacctga	ggtcaggaat	tcaagaccag	cctggccaac	atggtgaaac	cctgtctcta	54360
ctaaaaacac	aaaatcagca	gggtgtgggtg	ctgcatgcgt	ataatcccag	ctacttggga	54420
gactgaggca	agagaatccc	ttgaacctgg	aaggcagagg	ttgcagtga	ccaagactgc	54480
gccactgcac	tccagcctgg	gcaacaagag	caaaattcca	tctcaaaaac	aaaacaaaac	54540
aaaaacaaaa	acaaaaacaa	acatagaatg	ggtgctggcc	tagaaagcca	caaacagatg	54600
aatggagcac	aacattaagt	ccaggaataa	actcaaacac	acaggaaagt	ctggtgaacg	54660
ataataggag	gtaggatatc	gtgaagcgtg	gagtaagagt	gagttactca	accaacagtt	54720
ctgctgccac	tggctagcaa	gtaaatgcgg	atccctaccc	cactgctagt	ctccaaaatt	54780
aattccaaat	gagtcagtta	aatgttttaa	aaaccttcaa	aagttgccag	gcatggtggc	54840
tcacgcctgt	aatcccagca	ctttgggagg	ccgaggcggg	tggatcacct	gaggtcagga	54900
gttctagatc	agtgtgacca	atatagcaaa	acccacctc	tactaaaaac	acaaaaatta	54960
gctgggcatg	gtcgaggcg	cctatcgctc	cagctactca	ggaggctgag	ccaggagatt	55020
tactagaacc	caggaggcag	aggttgcatg	gggccaagat	cacaccaccc	acactccagc	55080
ctgggcaaca	gagtgcagct	cgttctcaga	aaaaaaaaaa	aaaaaaacct	tcaaaagtta	55140
tagaaagtct	gtgtgagtaa	tttttaatat	gaagcaagg	agagagatga	agcagggttt	55200
ctaaacatga	ctatagccat	ataaaagtat	gttataaag	tgggcgtggt	ggctcacgcc	55260
tgtaatccca	gcactttggg	aggctgaggc	gggtggatca	cctgagggtca	ggagtttgag	55320
accagcctga	ccaacatgga	gaaaccccg	ctctactaaa	aatacaaaaa	ctagctgggt	55380
atggtggcgc	atgtctgtaa	tcccagctcc	tcaggaggct	gaggcaggag	aattgcttga	55440

agtcggggagg	tggagggttgc	agtgagccga	gatcgcacca	ttgcactcca	gcctggggcaa	55500
caagagcgaa	actccgactc	aaaaaaaaaa	aatgttataa	aaccacacac	cactataaag	55560
aaatgataat	gcaaaaaatca	taaaggacga	aaaaaaaaaag	gaaatagatt	taactacaaa	55620
aaagtttttg	ttttgctttt	gttttttttag	agtttagatc	ttgttctttt	tcccaggctg	55680
gtacaatcat	agctcactgc	caccttgaac	tcttgggctc	aagcaatcct	cctgcctctg	55740
aaactgcgtt	tgcaaaaaatt	ataactgaga	aaacgatgac	agtgaagag	atctgacctc	55800
actgactcca	tcttgcttct	aacctccaag	ctgtccgtgt	tcattcctgg	gtgtaggcca	55860
aactaacttt	gggaggaatt	tagtttatag	tttaactttg	tcaaagttta	actaagatgt	55920
taatagccca	ttttccaaaa	caaaccctt	tcttgcttgg	ggactagact	gcctttgcag	55980
gactaacaaa	ttattatagc	taccagatta	gaaattatgg	tttaggagtc	atgcagctga	56040
agcctacaag	attctgaatc	tcccaaattg	ctcctggaga	taacatcacc	attgtaaaac	56100
ctaagatcag	tgcttgacat	attttgcaga	cctcgactc	gatggatcag	ctggcactac	56160
ccaaatggat	aaacaggctc	atctgatctg	tggtcccccac	ccagaaactg	acccagcata	56220
agaggaccgc	ttcaactcct	ataactttgt	ctccaacctg	aacaatcaac	actcccctac	56280
ttttctgacc	cctaccacc	aaattaccct	taaaaacctt	agccaggcgc	agtggctcat	56340
gcctgtaatc	ccagcacttt	gggaggctaa	ggcaggcgga	tcacctgagg	tcagggttcg	56400
agaccaacca	tggccaacat	agtgaacccc	catctctact	aaaaatacaa	aattagccag	56460
gtgtggtagt	gtgcgcctgt	aatcccagct	actcaggagg	ctgaggcagg	agaatcgcct	56520
gaacccggga	cacagagggtg	gcagtgaagc	aagatcactc	cactgcactc	cagcctgtat	56580
gacaagagca	aaactcgggtc	tcaaaaaacaa	aacaaaacaa	aaaaccacaa	gaaaaaaacc	56640
ctgaaccatg	atcctaaact	ctttcactat	tgcagttccc	ctgacttgat	acattggctc	56700
tgtctaggca	gcggggcaagg	ataaccatt	gggcagttgc	acctcagcct	cctgagtagc	56760
tgggattaca	aatgcaagcc	acagctaaaa	aaattttcaa	acctttgtag	gacagacaaa	56820
ttggggaaaa	catttgcaac	aaagggatga	tacacataca	tataaagagt	tctttcaagg	56880
ctgggcacag	tggctcacgc	ctgtaatccc	agcactttgg	gaggccgagg	caggcagatc	56940
acgagggtcag	gagttcaaga	ccagcctggc	caatatgggtg	aaaccccatc	tgtactaaaa	57000
atacaaaaaat	tagccgggtg	tgggtggcatg	cgctgtaat	cccagttact	caggaggctg	57060
aggcaggaga	attgcttgaa	cccgggaagc	agagattgca	gtgagccgag	atcgaccac	57120
tgcactccag	cctgggtgac	agagtgaagc	tccatctcaa	aaaaaaaaaaa	aaaaaaaaaag	57180
agttatttca	aatttaataag	aaaaataacc	aacacaaatc	aatagaaaaa	tggggaaaaa	57240
agaataggca	ctttacaag	aaataaatac	aaagcccagt	ggacatgaaa	ctttgccatc	57300
tccttagcag	ggcttggagt	aagatgggga	gaaggaagga	tgcaaaattt	aaggaggctg	57360
tcactctcag	ggccatgtaa	gtacaaaagt	ggcatatgag	ggtaagtgcc	tccttaaatg	57420
tgtaaattgc	tagagccctg	ctggatggca	gtctggcaaa	atggatcaat	attttaaatg	57480
tacaaaccct	ggcacaaatga	ttccattttt	aggaactgac	cttatggaaa	cgatcaggca	57540
agtgtgccaa	gaaacacatc	taggatgttt	ttaatgtcga	caaattagaa	atgacaggta	57600
aattcaaccc	tacggactga	ctttaaaaat	tgttacatct	ggctgggcat	ggtggctcac	57660
gcctgtaate	ccagcatttt	gggagaccaa	catgggagga	tcgcttgagc	ccaggagtct	57720
aagaccagtc	tgggcaacat	agggagaccc	cgtcgctaca	aaaaaaaaaaa	aaagtataaa	57780
ttagccagggt	tgggtgggtgca	tgcctgtagt	tctaactact	caggaggctg	aggaggagg	57840
atcacttgag	ccctagagggt	caagactaca	gtgaactgtg	attgcgccac	tgtactccag	57900
cctgggcaat	agagtgaagg	cctgtctcaa	aaaagaaaaa	aaaatgttac	atccaggtag	57960
attggcatcc	tgtgtaaaaa	ggatgccatc	ctgtagtccc	agctgcttgg	gaggctgagg	58020
caggagaatc	gtttgagccc	aggaattcga	ggcttcagtg	agctatgttc	acaccactgc	58080
acttcagcct	aggcaacaga	gcaagacttt	gtcaataaat	taaaagaaaa	ataaaaagta	58140
cgctactgtt	ctatagtggg	cgtggaaaga	ggctcagggt	atgccatatt	ggtacaagtg	58200
aacagaggaa	ccaacatatg	tcacatgata	ctattttttg	cacctgccc	tgtttatgtt	58260
cacattttga	aataatttgc	caaagtaatg	gtccctattt	cctgggtggg	ggattaattg	58320
caggggattc	ttactttctt	ctttatgcct	gctgcataaa	tacttgaaat	ccttaaaatac	58380
tgcttaatac	ttgaaaaagt	gattaaagct	aattttgtct	gagaaagaga	gtgggagtta	58440
acctgttatt	ctgtaacttc	ctggccccac	cagggttgac	tcctgcagag	cattctccag	58500
gtaaatgttt	ttgccctggc	ctgactgtat	ttcagaacta	ccaggagggtc	gttttgttta	58560
tcaaccaccc	agtgggggtca	aaaagaccct	taacttctac	aattccagcc	aaataaacag	58620
aagttgcttt	cgaaagtcta	gggcctccca	ttactaggat	cagtgaagtt	aggacttcag	58680
ggtagtgga	agggccttgg	tcccacagag	ctgtctcagg	gcacttaaat	ttccctaagt	58740
gtaaaaatga	cagcttcaac	cgtatcagtg	ttcttcacct	ttctcttttc	ttttcttttg	58800
agacagggtg	ttgctctgtt	acccaggctg	gagtgcaatg	gcaagatctc	agctcagtcg	58860
cgctcaacc	acccaggcta	atcaatcctt	ctacctcagc	ctcccaagta	actgggacta	58920
caggcctgtg	ccaccatgct	tggctaattt	tttgtagaga	tggggtttca	tcattgttgc	58980

caggctggta	tcaaacgcct	gggctcaaga	gatcctcctg	ccccagcctc	tcaaagtgct	59040
gcgattacag	gcgtgagcca	ctgtgcctgg	ctttttctta	aactcactct	cctttttaat	59100
aaagataaaa	ttcttacacc	cttcctagt	ggtagccttc	tccttattcc	aatagccgag	59160
aagatactgt	ggaactttac	tttctgtaga	ttatatcacg	aaaacaatag	ttgtcccca	59220
agctcatttt	ccaaaattaa	ataataattc	taagtatgct	tgtttgtaca	cagtacagga	59280
ctttctgaag	ccacaggcca	cctccagtcc	tggtcactga	tgcttggggg	ccttctctgg	59340
ctctcaatta	aaagctatag	tgtagtgact	gagtacccca	gttctgggac	acaacctggg	59400
tgagggtcgc	caggtaaaat	acagggcggt	ctgggggagg	tggtccacgc	ctgtaatcct	59460
agcacttttg	gaggccaaag	tgggaggatc	aggagtcca	gaccagcctg	gccaacatgg	59520
caaacaatgt	ctatactaaa	aataaaaaaa	ttagcctggg	gcagtggcac	atgcctataa	59580
tgccagctac	ttgggagggt	gaggcacaag	aatcacttga	accagggagg	cggagtgtgc	59640
agttagccaa	gaccacgcca	ctgcactcca	gcctgggcaa	cagagcgaga	ccctatctca	59700
aaaaaaaaaa	aaatatagat	acacacacac	acacacacac	acacacacac	acacacacac	59760
acacacacat	atgggtgtcct	ggaatctatt	tcctagatct	ggcaacccta	acctagtcca	59820
catttgggcc	tctgtctcca	ggcagtgtga	ctataagcac	agtctgtctt	tccttttttc	59880
tttgtctcac	cctctttctt	cttctttctt	cttctctccc	ttgcctgcct	gctttctcct	59940
tctttcattt	ttcttctccc	ctttctctcc	ctccactccc	tcctccttcc	ttcctttatt	60000
ccttacttcc	tctctccttt	tctctctctc	tttcttccct	aattgtgtca	agtgcataca	60060
tcttaatttt	aaatatgcag	cttgatgaat	ttttacatat	gcataaaactc	ctgcaaccac	60120
taccagatt	aaggagcacg	tttccagcat	cccaggaaat	tttctcatgc	ctcttgctgg	60180
tcagtatctc	ccccagaggt	aaccactctt	ctcacagcct	gttattgtca	attaattttg	60240
tatgttcttg	aatttcataa	aagtggaggt	atgcaatatg	agctcttaag	tgtctggctg	60300
cttcttctta	acctaataac	tgagattcat	tcagggtgct	atatataaca	gtattttccc	60360
ttttcattgc	tgtataatat	tccattgtgt	gaattttttt	ttggaggggg	gagttttgtt	60420
tcctgaaaac	accacaattt	gtttatccat	cctctgtctc	atagatatatt	ggttggttcc	60480
agtttggggg	gtaaatccaa	aataaaatcc	taagggtcca	ctaaatgaac	acccttcttg	60540
gcaaagggaa	ccccagaaaa	actttaaaaa	ctttgtttcc	agccatgatg	agacaggagg	60600
tcaggcacac	cacattacac	tcccttccct	ccttttgtgg	tttagataca	agaaaagatc	60660
agcatcaatg	ctaaaataga	gggctgagta	tggtgactca	cacctgtaat	cccagtcctc	60720
tgggagactg	aggaaggcac	atcactttag	gccagaagtt	cgagaccagc	ctgggcaaca	60780
tggtgaaact	ctgtctctac	aaaataaaat	aaaataaaat	aaaataaatta	gccaggcacg	60840
tggtgagctg	tcctgtggtc	ccagctactg	gggaggctga	gggtgagagga	tcgcttgagc	60900
ccaggaagca	gaggctgcag	tgagtcatga	tctttccact	gcactccagc	atgggtaata	60960
gagttagact	ctgtctcaaa	aaaaaaaaaa	aaagagagag	agattataag	actgacagaa	61020
cagacttttt	gtggcaataa	gataccaaat	tataaacaca	gcctaaggcc	atgtcaggga	61080
agggtttaagt	cagggtgccc	tactcttaag	gaataaacta	tgttcttaatt	atgttacaag	61140
atttttcttt	ttctctagca	gcgaaacaag	cactggcctc	agaagaagca	atattaaaac	61200
agttacaact	catctagcac	acagacaccc	aactgacacc	ctgttctctc	agtcataaca	61260
acaactacag	ctttgattga	acaagagact	gagttttgga	actttctcct	aataaaaaaga	61320
tcactgacta	tggactgctt	ctgggtgggt	tacgaaacgg	caacctcatg	tgcttgcatt	61380
tcctgaaaag	acattttgat	gtgtagggtc	taattgtaat	acattgattg	attgattgat	61440
caattgattg	attgagatag	ggtcttactc	tggtgcccag	gctggagtgc	agtggcacga	61500
tcacaactca	ctgcaacctc	tgcttctctg	gctcaagcaa	tcctcccacc	tcagcctccc	61560
aagtagctgg	gactacaggt	gcacgcaact	gcgcccggct	actttttgta	ttttttgtag	61620
agacaggggt	ttcgccatgt	tgcccaagct	ggtctcaaac	tcctgggctc	aagcgatcca	61680
cccaccttgg	actccaaaag	tgctagtatt	ataggcatga	gccaccatgg	ctggcctaata	61740
tgtaatacat	ttaaatgtta	agtctccacc	ccaaagtga	catgggttgt	atgttacatg	61800
cacatttgggt	catacacatg	tgttggggcc	accttcataa	atattcatag	cttctcctgt	61860
aacctgtctg	atatatcatt	cagccaaccc	cttcagcaca	aagctcctaa	cccaaccctt	61920
cctccttcaa	agtgtccgtc	tctgttcttg	gtaggaggca	tacttcccag	gccatggact	61980
gggtcaccttg	tgggtctataa	ccccttataa	gaaataagat	ttcttctcct	ctctgaattt	62040
acacatttgt	gatttttttt	tttttttttt	ttagttaaca	ggggctatga	acattcttac	62100
agaagccttt	tgattgatgt	gtgttttcat	ttatcttggg	tatatatata	ggcgtgggca	62160
tgatagatat	taggatagcc	atctttaact	tcagtggatg	ctggagcaag	tttctgaatt	62220
tcaactctga	agtggggatg	ataataacag	cacctgcctt	acagggctgt	ttcgagattc	62280
aaagagaaaa	tctgggtgaag	gcagggtgcg	gtgggtcacg	cctataatcc	caccactttg	62340
ggaggccaag	gtgggcagat	cacctgaggt	caggagtcca	agaccagcct	ggccaacatg	62400
tgaaaaccct	gtctctacta	aaaatagaaa	aacaattgagc	cagggtgaggt	ggtatgtgcc	62460
tgtaaaccca	gccactcggg	agtctgaggc	aggagaattg	cttgaatctg	ggaggcagat	62520

gttgacagtga	gttgagatgg	caccactgca	ctccagcctg	ggcgacagag	tgagactctg	62580
tctcagaaaa	aaataaaaaa	gaaaaaaaga	aaatccaggt	atttagaatt	ggtacaccgc	62640
aattttacaaa	acgtaaaatta	ttgctgtgat	ggcagtgagg	agcatgaaga	tattggacta	62700
acttttatga	atgttcaagt	gctcccatga	tgaattaaac	acacagggaa	ctttataagg	62760
gccatatgtt	atataagtga	tacatgacta	ttgtattaaa	attcaaaacta	gttagatata	62820
aagtaaaaaag	tggttttcac	cctatccatt	ttttattatt	gaagaaaaaa	aaatatgtca	62880
tagcgtgggtg	gcttatgcct	gtaatcccaa	ccctttggga	ggtcgggggtg	ggatgattgc	62940
ttgaggccag	gagtttgaga	ccagcttggg	caaaatagca	agaccctgtc	tttacaaaaa	63000
gtaagtaatt	tggtctgggtg	ttatggcatg	catctgtagt	cctggctagg	ctgaagcaga	63060
aggattgctt	gagcgcagga	gttcaaggcg	ccactgcact	ctggcctggg	tgacagagtg	63120
agatcctctc	tctctctctc	tctctttttt	tttttttttt	ttttgttttt	tgagactggg	63180
tctcactctg	tcacccaggc	tagagtgcag	tggttgatc	ttggttcaact	gcaagctccg	63240
cctcccagtt	caagtgattt	tcttgccctca	gcctcccagag	tagctgagat	tacggacatg	63300
tgccaccacg	gcccgtctaat	ttttgtattt	ttagtagaga	taggggtttca	ccaacatggt	63360
agccaggtctg	gtctcaaacg	cctaacctca	agtgatccat	ccacctcggc	ctcccaaagt	63420
gctgcgatta	caggcaagag	ccactgcgcc	tggtctgacc	ctgtctgtta	tcttttcttt	63480
ttctttttttt	ttgttttctt	tttttttttt	agacagagta	tcgctctgta	gcccaggtctg	63540
gagtggtgcag	tggtgccatc	ttggctcact	gctacctcca	cccaccaggt	tcaagcaatt	63600
ctcctgcctc	agcctcctgt	gtagccagga	ttacaggcac	accccaccac	tcctggctga	63660
ttttttgtaa	tttttagtaga	gacgggggtt	cgccatgttg	gccaggctgg	tctcgaactc	63720
ctgacctcag	gtgatccacc	caccatggcc	tcccaaagtg	tcagaattac	aggtgtgagg	63780
cactgtgccc	agccgacctt	cttttaaaaa	aggaaaaaat	actatgcagt	gagtattttg	63840
catgcattttt	cttattttcat	cttcgtcttt	ttatttgatg	atactaaagg	caggtgttag	63900
aggctggatt	gctaaagctg	acccaaagaa	tgctctcctc	agggctgggt	ggtccctctc	63960
tctcaggcct	cagtcttccc	atctgtacag	tgaggtgcct	gcagatctct	gggctctaaa	64020
aatcacagct	ccatgtttat	ccctggcgaga	ggaagggcct	ggagtccctgc	tgcttgcgctc	64080
tctgggatac	gggagcaaaag	agccacgcct	cctcatggcc	cacacaggcg	tcacctccag	64140
tctctccttg	gcctcatctc	cccagcgtcc	tggaatggca	tcgggctggc	ccaggagacc	64200
cctgtcctgt	gcctctcctt	tccctccagg	ggctgccagg	ctgaccacce	ccaccgcagg	64260
ccaggcctac	agtgcacctt	ggaacgtcct	gacctccccc	cagggtggca	gcaggaaaga	64320
ggaagaaaag	ggatccctctc	cagctggcca	gagagacaga	ccttcttggtg	ctcatcaacc	64380
ctccaagaat	gcctgccctc	cctccttccc	ccaaggcctg	tccacagggg	cttgagatca	64440
gccagaaaag	tcaggcaact	tttcaggggac	tggtgagcgag	gtctcccggc	cgggcctggg	64500
tccagctctct	gtgggcagtg	cagtgcagag	ccccacccct	caagccgtgc	cctgtccata	64560
gctccagact	ttgacctgc	actccagctc	gggtctggcg	acagagggct	ggaaacaaga	64620
cgctccagaa	tcaggagctt	cccctcagga	aatagcatcc	tgtgtccccg	cactgcagtt	64680
gtctggctctc	tccagcagtt	tggtacttcc	ggtgagtggc	agatgcacct	ttgagctggg	64740
gacaggggtt	gggagagggg	agaggcaaaag	gatttactgt	cctcccaatg	tcaaagacag	64800
ggctcaacat	tacagcctaa	ggcaggtgac	aggaacaggag	agatccagcc	tctcaaacat	64860
ccagcagaga	gacctaggtt	tccctcccca	agcctcagtt	tcttcacctg	64920	
gaacatgggg	atcataaactc	cctctttaca	gcgtgagctc	gagtgtttaa	agaggtgggtg	64980
catgtaaaagt	gcttagagca	gatctaggca	catagcaagt	actcaaattg	tagttattat	65040
tatttttgggt	gggggagttg	gtaggctggg	tctcaaactt	ttatagcttc	tgttccattt	65100
caaggataaa	ctctgcaaatt	aacttcatga	gaagtagccg	tgtggtgcaa	ccaggagaaa	65160
ctaattatgt	tcattcaaatt	gcctcatctc	tggttacttg	attttttttt	ttaaaaagaa	65220
gtctttcata	ttctttgcta	tggtgcacata	gcaatcaaag	gcactcagctg	tctcagattg	65280
ccttctaggg	gacaaggagg	gtcctaggca	gataaatgca	agactgaaag	acaagcagaa	65340
agcatcaagt	ggcaactgca	tgccaactgc	ctaaatatatt	ttttggagca	gtgcagaaag	65400
cgccgataga	actgggtcta	ggtccgaatg	ctgtcccata	ctgactgcgt	aaccttgggt	65460
gggtgacttc	tcctccctaa	acctcagctc	cagcctccag	aatgagggcg	gtaaccttcc	65520
ctacttcccta	gagcagttga	gaggattgag	aggattatgt	cggtagctgca	tctacagggtg	65580
tctggcaagt	ggcagagacc	aaaatacatt	ggttcccttc	ctgctccaca	cttacacaga	65640
cattctaattc	acacacacac	acacacacac	acacacacac	acacacacaa	atataataat	65700
cccagctggt	tgcatcttct	gggatacata	ctccaagctt	gctgggttga	agtaatgatg	65760
taaaacagag	gagaacggca	acactaataa	aaacatcagc	aacaacacga	aaatgtccaa	65820
ccgaataact	gagctgggtg	cgtttaagtc	caaaagctca	ttacctacac	gcatgaatga	65880
ttttacctaa	ggctggatct	gccacatctg	acaatctgtc	tctggcttgt	catgaggacc	65940
tcatgcattt	attttgtatt	ttaaaacaca	cacacacaca	cacacacaca	cacacacacg	66000
ttgctataat	cagtgtcaac	tttgactcat	atcttgaatt	tttttaaaaa	aagataattg	66060

acttaggact	cacacttttt	tcccttttaa	tttttttttt	tttttttttt	ttgacagagt	66120
ttcactcttg	tcacctgggc	tggagtgcga	tggcatgatt	tctgccact	gcaatctcca	66180
cctcccaggt	tcaagggatt	ctcctgcctc	ggcctcccga	gtagctggaa	tttcaggcgt	66240
gcaccacat	gccaaagctaa	tttttttgta	tttttgtaga	gacagggttt	caccatattg	66300
gccaggctgg	tcttgaactc	ccgacctcaa	gtgatctgcc	agcctcgacc	tcccaaagt	66360
ctggaattaa	agacgtgagc	cactgtgccc	ggcctttttg	attttccatt	ctattcctac	66420
caacactcta	aaaatttcta	caggcatttt	attttttttt	atttttatct	atttttatat	66480
atatttttat	tttgaaatgc	aggactctga	agcttcagct	gttccttatt	accgcttga	66540
ttctcagatt	tttcaaacca	tgtgatctac	tggcaagcat	ggcattttaag	cactagggt	66600
tatgagttag	gctggcctgg	gctctgcctc	tcaccacctg	gggtgtccagg	agctgatatt	66660
ccagttagga	gacaataagg	caaggagctt	tgctagctct	cataaaaagt	tatagatgag	66720
gtcgggcatg	gtggctcacg	cctgtaatcc	tagcactttg	agagtctgag	gccagcaaat	66780
cactgaggt	cagaagtttg	agaccagcct	ggccaacatg	gtgaaacctt	gtctctacta	66840
aaaatacaaa	aattagccag	gcatgtttgt	gcatgcctgt	aatcccagct	actcaggagg	66900
ctgaggcagg	agaatcacct	gaacccggga	ggcagagtct	gcagttagcc	aagattgtac	66960
cattgcactc	cagcctgggc	gacaagagt	aaaattctgt	ctcgaaaaaa	taaagtttat	67020
agatgaggaa	actgaggttc	gattagattt	aaccaactca	tcttggtttg	cctgggactc	67080
tgatgcactg	acttttagtc	tgaagctctg	catcctggga	ggaccctcag	cctggggcaa	67140
gctggggagg	ttggtcaccc	tcactcagtc	aagttgagca	acttgcccag	ggttacatgg	67200
ctgggtgtgt	cccaagtcag	gctgcgaacc	tgggtctgtc	tgactctcag	cctggggccat	67260
actgtctctt	agattcttca	tggagaatta	ggaaaaatac	agaaagccct	ttattcctct	67320
gccttctcat	tgttaacata	taaaaatggg	caagcggggc	gggtgcagt	cacacacctg	67380
aaagcccagc	gctttgggag	gctgaggggg	gaggattgct	tgagcctag	aattggaggt	67440
ggcagttagc	tatgatttag	ccactgcact	ccagcctggg	tgacagagt	agacctgtgc	67500
tcttaaaaaa	aagaaaaaga	gtggtcagct	ctccggaaat	tatgcagaca	gtcaaaaagc	67560
ccagagagg	gaattaacct	agccaagggtc	gcacagcaag	gcagaagtga	agccaggtct	67620
gactctgcct	ttctcttctc	ctcttttttt	ttttgaggca	gaatttcgct	ctgttgccca	67680
gactggaatg	cagtgggtgcg	aactcgactc	gctgcaacct	ctgctgccca	ggttcaagcg	67740
attctcctgc	ctcagcctcc	cgagttagctg	ggattacagg	cgcctgccac	cgcgcctggc	67800
taattttttg	agttttcagt	agagatgggg	tttcaccatc	ttggccagac	tggtcttgaa	67860
gtcctgacct	cgtgatccac	ccgcctcggc	ctcccagaggt	attgggatta	caggcgtaag	67920
ccactgcagc	tggctcctcc	tctctccttt	tgttctctga	atgtctttgt	tctatgtgat	67980
ttttcaaaat	cctaggagac	aggaaggagg	ctgtctgtgt	ttagggact	actctgtgcc	68040
agggcgtggt	ccaagaactt	ttgtcaaaat	tcttatttaa	tccgttaaat	gacctgtgta	68100
gattgggatt	aacctgtttt	tgcagatgaa	gagcttgtgt	ctccagaggc	aaagtatggg	68160
ggaagaggga	agagagaaga	ccaagggtcc	ctgagagggg	ctgtcaccta	agccccagta	68220
tccaagctcg	ggctcgaagc	tgggaaggaga	attgcctaga	ggaacgatac	ctttctgttt	68280
gttggttcta	tctccaactt	ggcttctgaa	accccaacag	agtccagttc	ttgtgggctg	68340
gagccgtttt	ccctccttta	taaaactagg	ccatatatta	aatgtcccgc	tgtccagggc	68400
cacaggcccc	agttgccagg	agctgaggtc	tgcgggagga	gagttgtgag	tgaagaggag	68460
ggaaagtgtg	atttggctct	tctgggcaca	aataattctc	ttgttctgcc	tcagcaggag	68520
cctgcagaat	atcttcctgc	tgtgcgggct	taagttagctt	caagggtaaa	agctggtagg	68580
ccttctaana	ttctcagggc	ccaatcagcc	ctgtgcccc	aggcaggtgg	agttctgtgc	68640
tggaagacca	agttctgagg	ccagacactg	cgtctgtcat	gctcatagct	gcatttgcta	68700
gctgccagcc	tggcacatgg	taggtgtgca	ttaagcgtgt	gttgagttta	ctcaaattga	68760
aattaagtca	cagctgtacc	atttaactgg	ctgtgtgact	tcaggtaagt	cacatcacct	68820
ctctgaacca	cagtttcctc	ctctgtaaga	cgggactgat	aacagcagcc	cctacctcat	68880
gagagtgttg	ggagacttgg	atgaatggat	gcttgtgaag	cactttagt	cggggccagc	68940
tgggtcacag	taggtgtctc	acaaatgtca	gatatattact	tcttttgcac	caggcagctt	69000
gttaaaattg	ttacgttttg	catcttgttc	aaatttccat	ccatcccctc	aagcataggt	69060
tattagaggt	tgaagcatct	tgccaaaagt	taacggccag	taggtggcag	agctgagtc	69120
tgaagccaga	gcccacgcga	ctaaccaccg	gcctaccag	cctacagttg	gtcgtgccct	69180
ctgctgggtc	ttttctatct	ccagcccaga	aactgggtgt	ctggggacgc	tccccagaga	69240
aagttgcac	attcaccagc	cgtgtgactg	tggccaagtc	tgggtcactt	ctccatacct	69300
cagtggttcc	atttgcaaaa	cgggaacaat	gatattcctt	cctcctaggg	gtcatcggga	69360
aggtcaaata	taaaaagggc	ttggtgggtg	ctggcacctt	ctaagccttc	agtggaatgg	69420
ggcaatggcg	ctaaggatga	tggagatgat	gggtgatgat	gtgtgcctca	accttctctt	69480
ccc						



cgcgagaccgc	ttcacccac	tcaccaccac	cgacgtggct	gccggcctct	ggcagcccta	69660
cctttctgac	cccaacaacc	cacaggaggc	gtgagtgagg	gtcacatagg	gtagcctggg	69720
gtgcccattg	acctaagtct	gcagaggagg	tcagggttcc	catcaccaag	agcaagcccc	69780
ttgtggaagc	tactgatcta	gcataaaata	aagaaaatgc	caggcgtggt	ggttcacgcc	69840
tttaatccta	gcactttggg	aggctcagggt	gggaggatca	cttgaggcca	ggagttccag	69900
atcagcctgg	gcaacgtggg	gaaaccccat	ctctaccaa	aatacaaaaa	attagccggg	69960
catggtggcg	cacacctgta	atcccagcta	ctcgggaggc	tgaggcagga	aaaccatttg	70020
agcctaggag	gtgaaggtgg	cagtgaagctg	agattccgcc	actgcactcg	tgacagagtg	70080
agactctgtt	tcaaaaagaa	aaaaataaag	aaaagattca	taaatattaa	gccccttgct	70140
ctgtgccaga	tactaggagg	cctttgtctcg	tcttccttaa	actgggtgcc	tgtcaatacc	70200
acatgattgg	tgaatctgga	aaacttcctc	tgttttaatt	tatacatttt	tattttattt	70260
ttgagattgt	gtttcactct	tgtcggccag	actggagtgc	aatggcgtga	tcctggctca	70320
ctgcatcctc	tgccctccag	gttcaagcga	ttctcctgcc	tcagcttccc	aagtaactgg	70380
gattacaggc	atctgccacc	acgcctgggt	aatttttgta	tttttagtag	agatggagtt	70440
tcattgtggc	cagactgggtc	tcgaactcct	gacctcaagt	gatctgccc	ccttgacctc	70500
ccaaagtgtc	gggattacag	gcatgagcca	tcattgcctg	ccaaatttta	tctttttaaa	70560
tagagatagg	gtctcactat	gttgcccggg	ctggctctga	actcctgggc	tcaagtgatc	70620
tgccctcctt	ggcctcccaa	aagtgtctgga	attacaggca	tgagccatca	tgccctgcca	70680
aattttatct	ttttaaatag	agatagggtc	tcactatgtt	gcccgggctg	gtcctgaact	70740
cctgggctca	agtgtatctg	cctccttggt	ctcccaaagt	gctgggatta	cagggtgtag	70800
cccttgacc	cagctgaatc	tagaaaaact	ctaagtgggt	gaacatctaa	gtgggtggat	70860
ggatgcacag	atttatcaaa	taaattgcaa	aggctattat	ggtagtttag	aaactgccag	70920
atggttcagc	aaatggaaca	cccaatgaat	agcagctcaa	acagattaaa	aaaaaatttt	70980
taagaggcat	cctgtcacc	aggctgaagt	gcagtgcac	gatcatagct	cattgcagcc	71040
ttgacctcct	gggctcaagt	gatcctccca	cctcagcctc	ccaagttagc	aggacacaca	71100
tgcatgctat	catgcctgga	taattttctt	tattttttgt	agagccaggg	tcttcctatg	71160
ttaccagagg	ttgtctcaaa	ctcctgacct	caagtgaacc	tcctgcctca	gcctcctgaa	71220
gagctgggat	tataggcatg	agccactgca	cccagccaga	attttaattc	acacagctgt	71280
aaaaaaccaa	tgattctgat	cagtgggcag	tgattcgggg	cccaggctcc	ttccatctaa	71340
tggtctctgc	gtttttccac	gtgcttttga	ggtcacctca	atgtcaccat	tcacatgggc	71400
tggtgactgc	agaaggatca	tcaggacca	cacgtgcaga	gtcttttagag	tccttgggcc	71460
agaaacaagt	cacacagtca	catttagctg	cgagagggtc	taggaaatgt	agggtgagctg	71520
tgtgcccagg	gggaggagga	aaagtgttag	gagcggcaag	tcgatgtctg	ccaccagtgt	71580
ttacaaggag	gggtgcttgc	agccagactg	aacagtgtgg	ctcataatcc	ccaaagccag	71640
gtcaaggact	tcactgaaac	tcattcagcca	tgtaatccca	tgctggagggt	gcactccata	71700
tggttatgat	ggggcatcct	tcattccctc	tcttctttat	tctattaatg	gggaaatatt	71760
ggaaaattta	ggaggagaga	gacccaaggc	atttggggag	ttgcaggagt	gaacgtgggtg	71820
gattttctggg	ttttggacac	accccaagct	cctgatcatg	ccacagcccc	atgccagctg	71880
acctaagggt	ttttggccag	ctcagggcct	tggtgatcgt	aactcttcat	gacccttcca	71940
gggactggag	ccaacagacc	tttgactatc	tcctgagcca	tgtccattct	cccaacgctg	72000
aaaacctggg	cctgttccta	atctcgggct	acaacctctt	ccatgaagcc	attccgggtg	72060
gtgaacagtt	cctgaccatg	agggatgagc	acccagggtc	ggggtagtga	gggtgggtgc	72120
agcagagcct	taatcacaga	tgaggggcgg	gtgctttgag	tctcgtaggc	aacagactcc	72180
tggtttcaaa	acaggttttg	tttaaattct	atttttgctt	tgaaaattat	ttttgtttta	72240
cattttgctg	ttaaattggc	agaggacaaa	gaatcttctg	atgcccaggg	gaaactagcc	72300
tttgattagc	atggctaaaa	tacaaacatg	ttctgcagtg	acgggcactt	ggtgctgaag	72360
ccaaaagggt	tcaagtgcct	ctgaagggtc	caaggctttt	tatcaagaag	gaataaaata	72420
ctcatcaaag	caaaaactgc	caaagcattt	attatgtgcc	agggtccagtc	ctaactaatt	72480
tacagctagc	gactaattta	attctcttta	taaccgggag	gtaagggtctg	tccttatcct	72540
cacttaataa	atgagaaaac	ggagggtcca	agaaatggag	taacttgccc	aaggccacar	72600
agctcgccag	tggcagagct	gggatttgaa	cccaggccat	ctgtgactcc	atggtgtcca	72660
gtgtgctaac	aggaacagca	cagccctggg	acgggttgct	caggctcctt	ggagagggtg	72720
gtctggcgct	gtgcccagag	ccccgtgcca	gctctcaagg	ttcattcaac	ccttggcact	72780
gtgctaaggg	ccttatccac	attatctgtt	acctttcatg	ggaccaagag	tatttttttt	72840
tttttgagac	agggtctcac	tgtattgccc	aggctggagt	gcattggcat	gatctcggct	72900
cactgcaacc	tctgcttcct	gggttcaagc	cattctcctg	tctcagcctc	ctgagtaatt	72960
gggattacag	gtgcgcacta	ccacgcctgg	ctaatttttg	tatttttaag	agatgggggt	73020
tcactatgac	ggcgggctg	gtctcgaact	cctgacctca	agtgatctgc	ctgccttggc	73080
ctcccaaagt	gctgggatta	caggcgtgaa	ccactgcacc	cggccaagag	tgattattaa	73140

ctccatgata	cagacaagga	aactgagctc	cagagaattc	aagtagcaag	tgatgaggct	73200
ggggtctctg	acactatgct	ctgctgtctg	acactatgct	ctggtgcttt	ctctcatccc	73260
cggggactct	cactgtttct	gctttctctc	ccctatttct	gacttttccc	ctataactca	73320
ccctcgggtc	tactcttacc	cttaccataa	ataggggtta	agaacatgaa	ctctggaact	73380
aagctgtatg	ggttaaaatc	tcaacaccac	catttattag	ctgtgtaatc	ttagacaagt	73440
tattttaatc	ttctaagcct	caattgggtc	atctgtaaac	tggggaaaga	atagcatcca	73500
ccccaatggc	ttcttgtgaa	gattaaatgg	accagtataa	gaaaatgctt	ggaacagtgc	73560
cttatatgca	cttagcatta	cataagtctc	tgtcattatc	atTTTTTTTT	TTTTTTGAGA	73620
tgaagtctcg	ctctgtggcc	caggctggag	tgcagcggca	caatttcggc	ttactgcaac	73680
ctccagctcc	cagattcaag	caattctcct	gcctcaatct	cctgagtatc	taggattaca	73740
ggcatgcacc	accatatctt	gctaattttt	gtattattat	ttagtataaa	cagggtttca	73800
ccatgttggc	cagactgggc	tggagctcct	gacctcagg	gatccaccca	tctcagcttc	73860
ccaaagtgtc	gggattacag	gtgtgagcca	cctcgctgg	cccattatca	ttattattga	73920
cttccatccc	accagtgcc	ccctttgtcc	ttcctcttca	ggacccttcc	tggaaggaca	73980
cagttctggg	atttcggaag	ctgaccccca	gagagctgga	tatgttccca	gattacgggt	74040
gagtttattg	tcacaggcaa	aggggactgg	ggcctgacga	gttagcagac	ctgtccagaa	74100
ggcagcagag	ggtagaggca	ccagatttcc	tgtcctaccc	aggccctgg	accctggctc	74160
cctggctcct	ggtccagctc	cttcagagag	gctacccact	caaacctggc	cttgggctgg	74220
gaaggtaggg	ggtatgaaat	cacagatctc	aagcccagaa	gctccatata	accatattgt	74280
tttgtagatg	aagatactga	gtttcagaga	ggctaagtga	cttcctaagg	tcacacagcc	74340
aagtggccaa	actgggattc	caaccagtct	gtatgacccc	acacccctcc	tttcttttct	74400
ctacagcctg	atgcctctct	ggtcttctcc	tcacccccc	ccacaccaca	cctgaatccc	74460
ctctacgaat	gcacattcaa	tctccacttg	cattttccaa	tgtcagatat	ggccttttct	74520
gatagaaaaa	ttttccttgc	attgagctca	aaaccacgtc	cccccttgaa	cttcacgtag	74580
tggctcctgg	actacccttt	gggcccacag	aacaacattg	ctcccacctc	catttcacag	74640
ccttcaaata	tagctctgat	ttttaccctt	atttccacct	tttgcttact	gtgactctag	74700
ctatggctgg	ttccacacaa	gcctaattct	ggaggggaaag	aactatctac	agtggctgac	74760
tgaaggtga	gattttaagc	ttcactttga	gggaggtacc	tcccagagac	caagttgtag	74820
tggaagatgg	ttcgtgggct	tccctcagca	tggactaacc	cccaggtttg	aagaataccc	74880
ttaggcctgg	tgtgggagct	atccttggtc	ctgatcaccg	ctgggcacag	aggcaatgga	74940
tctgagcct	agctgagcat	cagaaccacc	tgggcagctg	tttacacatg	atgtccatta	75000
acaacctctt	tcaaattcct	aatgtttgtg	taatagtttt	agatgtattc	ttttaagggt	75060
tccagataca	tttacatcat	ctgcaaaa	taagctgcct	tttattttta	tctccctctc	75120
tctttttttt	tcttctctaa	ctgctttggc	caatacctct	agaacaatgt	tactcataca	75180
gatgatagt	gatgtctttg	acttggtcct	catgttaata	ggaatcttgc	agtgttctaa	75240
attagcaaac	actcacttga	gagatacatt	ggtatttata	ttcacatata	ttcatattaa	75300
gggagattcc	ataccttttt	tgtgtgtgtg	agatggagtc	tcgctctgtc	acccaggctg	75360
gagtgacgtg	gtgcgatctt	ggctcactgc	aagctctgcc	tcctgggttc	atgtcattct	75420
cctgcctcag	cctctgagct	agctgcagct	acaggtgcct	gccaccacca	cacctggcta	75480
attttttgta	tttttagtag	agatgggttt	tcaccatgtt	agccaggatg	gtctcaatct	75540
cctgacctcg	taatctgccc	gcctcggcct	cccaaatgc	tgggattaca	ggtgtcagcc	75600
accacgcccc	gcctgattcc	atacattttt	tatatattac	tgttttttta	agatttttag	75660
gccaggcatg	gtggttcata	cctgtaatcc	tagcactttg	agaggccgag	gtgggcagat	75720
cacttgagcc	caggagttca	agaccagcct	gggcaacatg	gcaaaacctc	gtctctacag	75780
aaaaattcaa	aaatcagcca	ggtataatgg	tgcattgcctg	tagtcacagc	tacttaggag	75840
gctgaggtgg	gaggatggct	ttatcccggg	aaggagaggc	tgcatgtgag	tgtgatcatg	75900
ccactgcact	ccagcctggg	gggacagggc	gagaccctgt	ctcaaaaaaa	aaaaaaaaga	75960
ttaaaaaaat	atggaatata	tagtggcttt	tatcagatga	cctcagaaga	ttttttttta	76020
atgtagattt	taggaaccca	ctctatacct	gctgaattag	aacttctggg	ataagggttca	76080
taaatttget	ttttttcatt	tttttgagac	aaaatcttac	tttgtcacc	aggctggagt	76140
gggatgtagt	ggtatgaaca	caactcacag	cagcctcaac	ttcctgggct	caaagtatcc	76200
tcccacctca	gcctccaaag	tagctgggac	cacatgcatg	tgccacaatg	cctatctaata	76260
ttttaaatat	ttttgtagag	atagggctct	actatgttgc	ccaggctggt	ctcaaacccc	76320
tgggctcaag	caatcttctc	gcctcagcct	cccaaagtgc	tgggattaca	ggcgtgagca	76380
aacaggccta	gcaaaaaatt	gcatttttaag	aagcttctctg	gcgattctaa	ttatcagcca	76440
tgtttgggaa	tcattgtact	aagacatggc	tatttctcct	aacctgggga	cacatgaccc	76500
ttgtccagtc	ttttccagga	aaaacatgcc	ctcaagatgt	ttttctatct	tgaggaaatg	76560
atggaaaatga	gatagttcca	agggatgtct	tcaccttctt	tttggcttat	ttcctgttct	76620
ttggatgttt	ctagtgtatt	tctttctttc	ttcttttttt	tttttttttt	tttgagacag	76680

agtcttgctc	tgtaaccacg	gctggagtg	agtggcgcaa	tctcggetca	ctgcaagctc	76740
cgctcctgg	gttcatgcct	ttctcctgcc	tcagcctccc	gagtagcttg	gaatacaggc	76800
gcctgccacc	acgtctggct	aatttttttt	ttgtattgtt	agtagagacg	gggtttcacc	76860
gtgttagcca	ggatggcttc	aatctcctga	cctcgtgata	cgccacacct	ggcctcccaa	76920
agtactggga	ttacaggcgt	gagccaccgc	gcctcgctgt	ttctagtgtg	tttctaatac	76980
tgatagatgt	ttttcctatg	ggatgtttta	aaggagggtg	gatgtcctca	gccacacctc	77040
ctcctcatgc	ccggcttctg	acaaagggga	atltggcact	ggtacaactc	tccccttctc	77100
tactctgaat	ctcattgcct	ttgctgttac	aaagcaatgt	ggtggtcata	ggaagtgtct	77160
ggggctaaga	ggcctgggtt	tgagttccaa	ctocatcatt	gactcactct	atggccttca	77220
gcaaggccct	tccccactc	catctgcccc	acaaggggct	tggaccatct	ctggtttctc	77280
aaaggagatt	ttgtggacca	ccagtccagt	aggtgtcat	gagctgattt	gatgacacag	77340
ccatcttctc	aagcagcatc	ctgtgcaact	aacgtccgca	gaaggttggt	tggggaaagg	77400
tccctgtgcc	acccttcttg	gtgggatggg	ggcagatagc	tgaatactgg	gctttttgat	77460
gtgtttgatc	atcccagggt	aactgagagg	ggagtgaagt	tcttccagcg	gaaagtggag	77520
tcttttgagg	aggtgagttg	cagggtctgat	gcgggtggat	gggcagggaa	gaagtaggga	77580
ggcctctgct	tcttgcctgc	gagtcggggg	ctcccttctc	aggctcctag	ggtccccaca	77640
ggcctgcctc	agcacccttg	cccagaagc	actcaggtat	tctgaaggga	ggaagtctct	77700
gccttcatgt	tggtagtggg	aacaaaggaa	cactgggatc	atggtggcca	ttaggagctg	77760
atlttatatct	gagactcaat	gagttttggg	tctagagagc	tggccgcatt	ttctcagtgt	77820
cagctgcact	ccaagggtcag	aacttgggtg	cttccctagc	ctaccgacat	ctgtgttggt	77880
ctttctgcaa	agtccaggcc	ctcagctgac	tcacctctaa	agaagcacca	ccaccaataa	77940
taatgacagg	aaaagccacc	atctccaggc	accagcaaaa	agagctttac	tgtatggctt	78000
cattcaatcc	cagcatctaa	aacctctgct	ggcacaaggga	aggcgctccg	tacatgtagc	78060
tactagtgtc	atgtcatgaa	gactaacctg	ctctgggtcag	gccctgatgg	acaccgaaga	78120
tacatggtcg	acccaatgca	gtcctcattc	tcagtcattc	actcaggaac	aatagtagcg	78180
tcttgcaatg	tgtgtgtccc	ttactttact	cgtgggtgaga	gtcactgggg	ctgggttggg	78240
gagcttaggg	gctcacgatg	cgtgcttgag	atgagatcat	ctcatctgta	gacagagctg	78300
gggttccaac	gtgtcttctg	caaatgtctt	ggcagagtag	aaggcaagag	aataaagtta	78360
aaaggagtca	gaaggagaaa	gagaactctc	tctgcttcc	ttctgacttc	ttttgggagg	78420
ttccaggaag	atltccccca	tccaaagaac	tgttttacaa	ccacttttat	attcagagtt	78480
gtgcaggagc	ctcataacag	cctatgaaca	gccatgggca	gcctcatttt	acaggggcag	78540
ctgagaatta	aggaggtaac	cagacatttt	caaggtcaca	cgtcagataa	atggcagtat	78600
gaaaaattga	agccaggccc	ctctgattcc	tcattgagac	ctctccccac	tgttcatcag	78660
ggagtagaca	gattgagggg	agaagaaagg	ggaagagaga	acaggggata	ccagggtctt	78720
ccccaccttt	catccccac	tacctgttg	gttgctacca	ggtggcaaga	gaaggcgacg	78780
acgtgattgt	caactgcact	gggggtatgg	ctggggcgct	acaacgagac	ccctgtctgc	78840
agccaggccg	ggggcagatc	atgaagggtg	gtgtgagggg	gagaccccta	ccttttgcta	78900
ataggaagat	cattctgcat	gcttattttc	tccctcaaga	tcattggaaa	atcaggaaca	78960
tctgttagag	gaaccccccg	gactgcaggg	aattgacatg	taaaaaaaac	aaacctgtcc	79020
cacccccatt	gctctctttc	aggatttctc	cttgatcgtg	aagcatgcat	gtatgcgctt	79080
gtacctatgt	gggagcgaca	tatgcctgta	ttgcaataaa	aatagcaaac	attagagtgt	79140
ttaccaagcg	cgagatacag	tcctaagcac	tttattgtgt	ttattattat	tattaattat	79200
taattgtgtt	attattatta	tcattgttat	tattattttt	gagacagggg	atcactccat	79260
tgcccagggt	agagtgcagt	atcttgatca	tggctcactg	tagccttgac	ctcccaggct	79320
cccaccttag	cctactgagt	agctgagact	acaagcgcat	gccaccacca	tgctcagcca	79380
atlttttttat	tttttgtaga	gaaaggattt	caccatattg	ctcaggctgg	tctcaaactc	79440
ctgggctcaa	gtgatcccc	caccttggcc	tgtcaaagtg	ctgggattac	aggcgtagac	79500
caccacgctc	agcctattgt	gttaattaat	ttagtgatgg	ccacagccct	tcgagctggg	79560
tactaccata	tcgttattgt	catcttacag	atgaagaaat	tgaggcacag	aggagttaag	79620
taacaggcac	aagttcacac	ggtagtacgc	agtgcgaatt	ggattggaat	ccaggcaacc	79680
tggcttaaga	gcctgtgcgt	gcaagcattg	ttccatgcct	cctcttgctg	tgtgtgtgca	79740
tatgagggta	tgtgtgtgtg	catgtatgtg	tgtgtgtgta	tgtgaagggt	tgtgtgcata	79800
tgtgtgtgtg	catgtgtgtg	ggtgtgtgtg	catgtgtgtg	ggtgtgtgtg	catgtgtgtg	79860
agggtgtgtg	catatgtgtg	ggtgtgtgtg	catatgtgtg	ggtgtgtgtg	catgtgtgtg	79920
agggtgtgtg	catatgtgtg	atgggtgtgtg	tgcacgtatg	tgggggtgat	tgtgcatgta	79980
tgtgaggggt	tatgtgcata	tgtgtgatgg	tgtgcgtgca	tgcacaccat	gtgaggggta	80040
tgtgtgtgtg	catgtgtgtg	aaggtgtgtg	cgtgtgtgtg	agtgtatgta	cgtgtgtgtg	80100
gggtgtgtgtg	tgtgagggta	tgtatgcatt	tgtgtgaggg	tatgtgtgtg	catgtgtgtg	80160
agggtgtgtg	catgtatgta	agggtgtgtg	tacatgcatt	tgtgtgaggg	gtatatgtgt	80220

ggatgcatgt	gaggggtgtgt	gtgtgcatgt	gtgtgaggggt	gtgtgtctga	gggtgtgtgt	80280
gtgcatgtgc	acctgtgagt	gttcataggt	gtgcaggtgt	gtgtgcttct	gtgtgtaggg	80340
gtgctgtgt	gtgttcctaa	tgtgggctga	tgggtgtaac	aaccaaatga	gtgactgaag	80400
cataagtctc	aaatcatcga	ggtttatgga	gccagcttga	gggcgcaccc	aggaaaaacg	80460
cgagtacacag	atgcacctgt	gactcctttt	tccaaagagg	ttctcaggag	athtagtctt	80520
tatacatttt	ctttaaaaaa	aaaaaagtga	gagaaggggtg	tagcagcgag	agaatgattg	80580
catacttgtg	aaactttagt	tagtgcccag	taaatctaca	ttttacataa	gatgaagggt	80640
tggggccaggc	gtggtgactc	acacctgtaa	tcccagcact	ttgggagggt	gaggcagggtg	80700
gatacagagg	tcaggagttc	gagaccagcc	tggccaacgt	ggtgaaaccc	catctctact	80760
aaaaatacaa	aaaattagct	gggtgtgggtg	gcgggtgcct	gtaatcccag	ctactcggga	80820
ggctgacgca	ggagaatcgc	ttgaaccccg	gaggcagagg	ctgcagtga	ccgagactac	80880
accactgcac	tccagcctgg	caacagagcg	aggctgtctc	aaaaaaaaaa	aaaaaaaaaa	80940
aaattgaagg	tttgaaggaa	aaaggaatgg	aggaagttct	gtatctggga	agataagctt	81000
gtcattgatg	ttatcagtgt	ggagtctgtt	gaaagggctg	gtttctgctt	accccttagg	81060
gaagaaagcc	taacttttgt	caggtcattg	agggaggggga	tataatgaga	cgtgtcggac	81120
ctcccttccc	ccgcagctg	tgaactcagc	tccaagggtt	ctctggggct	cctggggcca	81180
agaggggggtc	tgttcagtcg	gttggggact	tagaatttta	tttttatttc	tcatgtgtat	81240
gcattttacat	gtgtgtactg	gtgcttttct	tccgacatgt	gggtgaggag	aaacaatgct	81300
tcaggggagca	gggggtggctg	ccaattaggg	cagctcttcc	tgcaagaggc	aagcagtcag	81360
gtgcagactt	gggccatagt	gtcatgagag	gtcttataag	gaatcagcct	ggccactctt	81420
gtcaggacat	ctggccacag	aggggagcaa	gggcagccac	attgactcac	ctccgctgat	81480
gagactttcc	tgccctgaat	caacaggtgg	acgcgccctg	gatgaagcac	ttcattctca	81540
cccatgacct	agagagaggc	atctacaatt	ccccgtacat	catcccaggg	taaaattgga	81600
ctgttctcgg	gcagaagagt	ggcccccttc	atgcctctt	catgaccctg	ctgcctcccc	81660
caagctcctt	actccctgca	gttgttccct	ttcaatgttt	ttatgtactt	agctattttt	81720
tattattatt	ttttgagaca	gagtttctct	cttattgccc	aggctggagt	gtaatgggtgc	81780
gatcttggct	cactgcaacc	tctgcccctc	aggttcaagc	aattatcctg	cctcagcctc	81840
ccaagtagct	gagattacag	gtgcccacca	ccacatccag	ctaatttttt	gtatttttag	81900
tagagacagg	gtttcaccat	gttggccagg	ctggctctga	actcctgact	caggtgatcc	81960
acctaccctt	gcctcccaaa	gtgctgggat	tacaggcgtg	agccaccgtg	cctggccccc	82020
tttcaatggt	tttagtgagt	ttgagctact	gaacccctgg	gaaggcagac	tcagcctcga	82080
ctgaggtcta	ccgtgaacat	tcttttggat	gacaatagt	gtgatgctgg	agacaaaggc	82140
agtggatgta	atgtggtgac	actaaaagt	gtatgtaggt	ggctcacgcc	tgtaatccca	82200
gcacttttgcg	aggccaatgt	gggaggattt	cttgagccca	ggagttcaag	accagcttgg	82260
gcaacatggc	aagaccccg	ctctacaaaa	atacaaaaaat	tagccggggc	tgatgggtgta	82320
tgcctatgg	cccagctatt	cgagagggctg	agatgggagg	attgcttgaa	cctgggagggt	82380
tgaggatgca	gtgagccatg	ttcacaccac	tgtactccag	cttggggccac	agagcgagac	82440
cccatctcaa	aaaaaaaaaa	aagtgggtgtg	aatggcaata	atgggagtgg	gaatgggaat	82500
ggtgattggg	gctgatgggtg	atgataatgt	taacggtgga	gatgacaatg	tactgaaac	82560
cagtgggtgtg	gttcatggga	tgacaataat	gttgatagcg	gaatgggtgtg	attagggata	82620
atattgtatt	gatggggaa	acagcgttca	tgggggtgtg	gattagcgta	agagttgtag	82680
agtgggtgatg	ttaatggagg	tggctctgggtg	ctgatgagga	gatcaatgtt	gatgaagggtg	82740
tgattggggag	tggggatgg	agctgggtgct	gatggaaatg	acactatcaa	tgatgttaat	82800
actgtagcag	agctgacagt	ctcaaaggca	atgttaataa	catggttgca	ccaaccatgt	82860
tatctcaatg	gcgatgttac	tgggtgctgtg	gagatgacaa	tatcaatggc	aatgttagtg	82920
gtgggtgggtga	aatgatgaat	gcagtgggtg	gtgatgacct	attaatgata	gtagcaaaga	82980
caatgtttgtt	gatggagatg	acaacattga	tgggaagtgg	gatggaagag	ttcgtttgtt	83040
gtgttgatgg	tgatgacagt	ggcaattgag	gtagtgtgg	tgggtgggtgtt	agcagaggtg	83100
acaaggttga	tggtaatgac	ctttattcat	ctcagagcct	tcattttccct	tcactccttga	83160
ccctcctcat	ttgtatctag	gacccagaca	gttactcttg	gaggcatctt	ccagttggga	83220
aactggagtg	aactaaacaa	tatccaggac	cacaacacca	tttgggaagg	ctgctgcaga	83280
ctggagccca	cactgaagg	aaggtaggga	ggagtagcag	tgccctaaac	caaggtcgtg	83340
ggagcttgg	aatgaggaca	cttcaggacg	ggaagatgcc	accgctggga	taactgggca	83400
aattaattcc	agcaagggat	gtggaacata	acagaatttg	ataatgtaca	gggaagttct	83460
tgetatgggc	taatgaatcc	tgtctggcca	tggctgagag	cccttgggtt	tcacatttgt	83520
ctgcagtgta	tgatgacagt	agtgtgggtg	atgaggatga	gttgggtactg	atgggtgagga	83580
aaatgctgag	aatggtaata	gtgatgggtga	taagggtgg	acagttgtta	aaattatgg	83640
ggtggctgat	gggtgagggt	gtgggtgatg	atggaaattgg	tggaaagggtg	gaagcagtaa	83700
tggtaatgat	gttggtagct	gataaagatg	gtgttgggtg	tagtgggtgat	tgataaagat	83760

gactgtgatt	atattagtgg	tggtgggtgat	gagattctaa	aagctaactc	cctactacct	83820
aaaaatggca	gcaggaaaaa	aaaatccaga	aatgagtgat	cagcactttt	ctttccagaa	83880
tgcaagaatt	attggtgaac	gaactggctt	ccggccagta	cgccccaga	ttcggctaga	83940
aagagaacag	cttcgcactg	gaccttcaaa	cacagaggta	tgctcccatg	gcaaggaaag	84000
taatgccctc	ttccactcct	cagatggctc	tggtcatttt	agggarcagt	catgtctgat	84060
ctcaagttcc	acacaggctc	catagcaggc	aggggcagtg	gtggctaata	ccccctcctc	84120
tataaatggg	gaaactgagg	ctcaatgatg	gttaaggacc	tgctcaagg	tacatagagg	84180
ggcagtggtg	atgttaaatg	aggtgggtg	gatgagatca	atgttgataa	tggtgtgact	84240
gggagtgggg	atggtagctg	gtgctgatgg	aaatgacact	atcaagtatg	ttagtaccac	84300
agcagagggtg	acgatctcaa	aggcagtggt	aacatggctg	cactaactgt	ctcattggca	84360
atattaatcg	tgtggcagag	atgacagtat	caatggcagt	gttaatgatg	gtggtgaaat	84420
ggtgaatggg	gttgggtttt	ttaaagtctgt	ggtcaaataa	caggaaaatg	tgtacttact	84480
ggatgtgtac	ttcgtgtcac	acacagcagc	aagtccatta	catgaatgac	cttattaaat	84540
ctcctctgga	gtcctttggg	atagggacag	ttctccctat	gcttcggatg	aggaaactgg	84600
ggtgaattaa	gaggtgaagt	cacttgccca	agtcagacca	ctggtggaag	gcagggtcgg	84660
gatgtgattt	gaatttgact	ccaaggctat	ttccagatat	ccattttgtg	gctgccccat	84720
catctcttgc	aactgttcca	gggggtcccc	accattccac	ccgggtgcca	agagaagctc	84780
aggtggcatc	tggtcttgcc	caggactcct	cgggaggctc	ctgagtcttc	cagggcagaa	84840
gagcttcac	tattctttcc	actgtccctc	tgggacctgg	ccaccttctc	tcttgccctc	84900
cctaggtcat	ccacaactat	ggccatggag	gctacgggct	caccatccac	tggggatgtg	84960
ccctggaggc	agccaagctc	tttgggagaa	tcctggaaga	aaagaaattg	tccagaatgc	85020
caccatccca	cctctgaaga	ctccagtgc	tgctgcctcc	ccccacaaga	actcccttct	85080
cccctcagcc	aatgaatcaa	tgtgtctcct	cataagccat	tgcttctccc	tcacttcttt	85140
cctcaaagaa	gcatgagggtg	agagaaagcc	acaaagtcag	tgcttgagga	agggttcagc	85200
ccaacatggg	gccccctctc	tcactgaaat	ccctctacct	tctctgggtc	tggcattata	85260
aagaacagct	gaggctgtca	ttccatgagt	cttcagaaga	aaggacagct	cagaaaatca	85320
aagaggccaa	ctgcccagag	ccacagaaaa	tggaggataa	ttgaggctaa	gtaacctgat	85380
tacaagtgtg	actaacatat	taaaggttct	gaaaagtcct	gcagcaaaga	caactatctg	85440
atgttgttta	acccagtgtc	tgctaaacct	atctggctat	ggaactcttt	tgcccagagc	85500
acccatgaat	gccatgacac	aaatctgaga	aaatgctgga	acagattttg	ttgtatctgt	85560
tgtgtttgtt	gtaggaggtt	atacatataa	ctgggggtgtg	gagggggcag	agagggtgagg	85620
cactgaacta	gtaacacatg	gtgtttgttc	cacatctaga	attccaaatg	gcatcagcta	85680
ttcacccagt	ggccccatga	gcaccacgta	acctttgagg	agggggccact	ggagggatca	85740
tcccacaagg	aaccccttca	tagagaactg	ttttagtcca	ttttctgttg	cttataacag	85800
aatatctgaa	actggagatt	tttttttttt	ttttttgaga	caggatctca	ctctgtcacc	85860
caggctgggtg	tgacgtggca	tgatttttggc	tcactgcaac	ctccgcctcc	caggctcaaa	85920
tgatcctccc	tcctcagcca	cccagtagtc	tgggactaca	ggcgcttgct	accatgcccc	85980
gctaattttg	tgtgtgtgtg	tgtgtgtgtg	tgtgttttgt	agagagtgtt	ttgtagagac	86040
tgggttttggc	catgttgctc	aggctggcgt	tgaactcctg	ggatcaagtg	atcctcctgc	86100
ctcagcctcc	aaagtgggtg	gattataggt	ataagccacc	acgcctggcg	gaaactgtgg	86160
aattaataga	gaaaagggaat	ttattttatta	ccgttataga	gtctgagaag	tccaagggtg	86220
agggggccaca	tctggtgaga	gccttctctc	tggtcgtgtg	agaggtgggg	actctctgca	86280
gagtcacagg	gaggcttagg	gcatcacgtg	gtgagggggc	tgattgtgct	aatgtgctag	86340
ctcagctctg	tcccttgctc	tagaaagcca	ccattttcct	tccaagatg	acccattaat	86400
ccattaacct	aataacccat	taattgataa	atggattaat	ccatttatga	gagcagcgct	86460
cttaggatcc	aatcacctct	taaaggcgcc	acctctccag	accaccacta	agggtgggtgga	86520
ctaaggacta	agtctcaacg	tgagtttttg	cagggacgtt	taagcaatag	caagaactaa	86580
actcaccaag	ca					86592

<210> 2  
 <211> 1573  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> 5'UTR  
 <222> 1..143

<220>

<221> CDS  
 <222> 144..1187

<220>  
 <221> 3'UTR  
 <222> 1188..1573

<220>  
 <221> polyA\_signal  
 <222> 1549..1554

<400> 2  
 tgcactccag tccgggctgg cggacagagg gctggaaaca agacgctcca gaatcaggag 60  
 cttccctca ggaaatagca tcctgtgtcc ccgcaactgca gttgtctggt ctctccagca 120  
 gtttggtact tccggctgct gca atg cgt gtg gtg gtg att gga gca gga gtc 173  
 Met Arg Val Val Val Ile Gly Ala Gly Val  
 1 5 10  
 atc ggg ctg tcc acc gcc ctc tgc atc cat gag cgc tac cac tca gtc 221  
 Ile Gly Leu Ser Thr Ala Leu Cys Ile His Glu Arg Tyr His Ser Val  
 15 20 25  
 ctg cag cca ctg gac ata aag gtc tac gcg gac cgc ttc acc cca ctc 269  
 Leu Gln Pro Leu Asp Ile Lys Val Tyr Ala Asp Arg Phe Thr Pro Leu  
 30 35 40  
 acc acc acc gac gtg gct gcc ggc ctc tgg cag ccc tac ctt tct gac 317  
 Thr Thr Thr Asp Val Ala Ala Gly Leu Trp Gln Pro Tyr Leu Ser Asp  
 45 50 55  
 ccc aac aac cca cag gag gcg gac tgg agc caa cag acc ttt gac tat 365  
 Pro Asn Asn Pro Gln Glu Ala Asp Trp Ser Gln Gln Thr Phe Asp Tyr  
 60 65 70  
 ctc ctg agc cat gtc cat tct ccc aac gct gaa aac ctg ggc ctg ttc 413  
 Leu Leu Ser His Val His Ser Pro Asn Ala Glu Asn Leu Gly Leu Phe  
 75 80 85 90  
 cta atc tcg ggc tac aac ctc ttc cat gaa gcc att ccg gac cct tcc 461  
 Leu Ile Ser Gly Tyr Asn Leu Phe His Glu Ala Ile Pro Asp Pro Ser  
 95 100 105  
 tgg aag gac aca gtt ctg gga ttt cgg aag ctg acc ccc aga gag ctg 509  
 Trp Lys Asp Thr Val Leu Gly Phe Arg Lys Leu Thr Pro Arg Glu Leu  
 110 115 120  
 gat atg ttc cca gat tac ggc tat ggc tgg ttc cac aca agc cta att 557  
 Asp Met Phe Pro Asp Tyr Gly Tyr Gly Trp Phe His Thr Ser Leu Ile  
 125 130 135  
 ctg gag gga aag aac tat cta cag tgg ctg act gaa agg tta act gag 605  
 Leu Glu Gly Lys Asn Tyr Leu Gln Trp Leu Thr Glu Arg Leu Thr Glu  
 140 145 150  
 agg gga gtg aag ttc ttc cag cgg aaa gtg gag tct ttt gag gag gtg 653  
 Arg Gly Val Lys Phe Phe Gln Arg Lys Val Glu Ser Phe Glu Glu Val  
 155 160 165 170  
 gca aga gaa ggc gca gac gtg att gtc aac tgc act ggg gta tgg gct 701  
 Ala Arg Glu Gly Ala Asp Val Ile Val Asn Cys Thr Gly Val Trp Ala  
 175 180 185  
 ggg gcg cta caa cga gac ccc ctg ctg cag cca ggc cgg ggg cag atc 749  
 Gly Ala Leu Gln Arg Asp Pro Leu Leu Gln Pro Gly Arg Gly Gln Ile  
 190 195 200  
 atg aag gtg gac gcc cct tgg atg aag cac ttc att ctc acc cat gac 797  
 Met Lys Val Asp Ala Pro Trp Met Lys His Phe Ile Leu Thr His Asp  
 205 210 215  
 cca gag aga ggc atc tac aat tcc ccg tac atc atc cca ggg acc cag 845  
 Pro Glu Arg Gly Ile Tyr Asn Ser Pro Tyr Ile Ile Pro Gly Thr Gln  
 220 225 230

```

aca gtt act ctt gga ggc atc ttc cag ttg gga aac tgg agt gaa cta      893
Thr Val Thr Leu Gly Gly Ile Phe Gln Leu Gly Asn Trp Ser Glu Leu
235                240                245                250
aac aat atc cag gac cac aac acc att tgg gaa ggc tgc tgc aga ctg      941
Asn Asn Ile Gln Asp His Asn Thr Ile Trp Glu Gly Cys Cys Arg Leu
                255                260                265
gag ccc aca ctg aag aat gca aga att att ggt gaa cga act ggc ttc      989
Glu Pro Thr Leu Lys Asn Ala Arg Ile Ile Gly Glu Arg Thr Gly Phe
                270                275                280
cgg cca gta cgc ccc cag att cgg cta gaa aga gaa cag ctt cgc act      1037
Arg Pro Val Arg Pro Gln Ile Arg Leu Glu Arg Glu Gln Leu Arg Thr
                285                290                295
gga cct tca aac aca gag gtc atc cac aac tat ggc cat gga ggc tac      1085
Gly Pro Ser Asn Thr Glu Val Ile His Asn Tyr Gly His Gly Gly Tyr
                300                305                310
ggg ctc acc atc cac tgg gga tgt gcc ctg gag gca gcc aag ctc ttt      1133
Gly Leu Thr Ile His Trp Gly Cys Ala Leu Glu Ala Ala Lys Leu Phe
315                320                325                330
ggg aga atc ctg gaa gaa aag aaa ttg tcc aga atg cca cca tcc cac      1181
Gly Arg Ile Leu Glu Glu Lys Lys Leu Ser Arg Met Pro Pro Ser His
                335                340                345
ctc tga agactccagt gactgctgcc tccccccaca agaactccct tctccctca      1237
Leu *
gccaatgaat caatgtgctc cttcataagc cattgcttct ccctcacttc tttcctcaaa      1297
gaagcatgag gtgagagaaa gccacaaagt cagtgcctgg agaagggttc agccaacat      1357
ggggccctc tcatcactga aatccctcta ccttctctgg gtctggcatt ataaagaaca      1417
gctgaggtcg tcattccatg agtcttcaga agaaaggaca gctcagaaaa tcaaagaggc      1477
caactgcccc gagccacaga aaatggagga taattgaggc taagtaacct gattacaagt      1537
tgtactaaca tattaaaggt tctgaaaagt cctgca                                1573

<210> 3
<211> 1691
<212> DNA
<213> Homo sapiens

<220>
<221> 5'UTR
<222> 1..143

<220>
<221> CDS
<222> 144..1187

<220>
<221> 3'UTR
<222> 1188..1691

<400> 3
tgactccag tccgggctgg cggacagagg gctggaaaca agacgctcca gaatcaggag      60
cttccctca ggaaatagca tcctgtgtcc ccgactgca gttgtctggg ctctccagca      120
gtttggtact tccggctgct gca atg cgt gtg gtg gtg att gga gca gga gtc      173
                Met Arg Val Val Val Ile Gly Ala Gly Val
                1                5                10
atc ggg ctg tcc acc gcc ctc tgc atc cat gag cgc tac cac tca gtc      221
Ile Gly Leu Ser Thr Ala Leu Cys Ile His Glu Arg Tyr His Ser Val
                15                20                25
ctg cag cca ctg gac ata aag gtc tac gcg gac cgc ttc acc cca ctc      269
Leu Gln Pro Leu Asp Ile Lys Val Tyr Ala Asp Arg Phe Thr Pro Leu
                30                35                40

```

acc	acc	acc	gac	gtg	gct	gcc	ggc	ctc	tgg	cag	ccc	tac	ctt	tct	gac	317
Thr	Thr	Thr	Asp	Val	Ala	Ala	Gly	Leu	Trp	Gln	Pro	Tyr	Leu	Ser	Asp	
		45					50					55				
ccc	aac	aac	cca	cag	gag	gcg	gac	tgg	agc	caa	cag	acc	ttt	gac	tat	365
Pro	Asn	Asn	Pro	Gln	Glu	Ala	Asp	Trp	Ser	Gln	Gln	Thr	Phe	Asp	Tyr	
		60					65				70					
ctc	ctg	agc	cat	gtc	cat	tct	ccc	aac	gct	gaa	aac	ctg	ggc	ctg	ttc	413
Leu	Leu	Ser	His	Val	His	Ser	Pro	Asn	Ala	Glu	Asn	Leu	Gly	Leu	Phe	
75					80					85					90	
cta	atc	tcg	ggc	tac	aac	ctc	ttc	cat	gaa	gcc	att	ccg	gac	cct	tcc	461
Leu	Ile	Ser	Gly	Tyr	Asn	Leu	Phe	His	Glu	Ala	Ile	Pro	Asp	Pro	Ser	
				95					100					105		
tgg	aag	gac	aca	gtt	ctg	gga	ttt	cgg	aag	ctg	acc	ccc	aga	gag	ctg	509
Trp	Lys	Asp	Thr	Val	Leu	Gly	Phe	Arg	Lys	Leu	Thr	Pro	Arg	Glu	Leu	
			110				115						120			
gat	atg	ttc	cca	gat	tac	ggc	tat	ggc	tgg	ttc	cac	aca	agc	cta	att	557
Asp	Met	Phe	Pro	Asp	Tyr	Gly	Tyr	Gly	Trp	Phe	His	Thr	Ser	Leu	Ile	
		125					130					135				
ctg	gag	gga	aag	aac	tat	cta	cag	tgg	ctg	act	gaa	agg	tta	act	gag	605
Leu	Glu	Gly	Lys	Asn	Tyr	Leu	Gln	Trp	Leu	Thr	Glu	Arg	Leu	Thr	Glu	
	140					145					150					
agg	gga	gtg	aag	ttc	ttc	cag	cgg	aaa	gtg	gag	tct	ttt	gag	gag	gtg	653
Arg	Gly	Val	Lys	Phe	Phe	Gln	Arg	Lys	Val	Glu	Ser	Phe	Glu	Glu	Val	
155					160					165					170	
gca	aga	gaa	ggc	gca	gac	gtg	att	gtc	aac	tgc	act	ggg	gta	tgg	gct	701
Ala	Arg	Glu	Gly	Ala	Asp	Val	Ile	Val	Asn	Cys	Thr	Gly	Val	Trp	Ala	
			175						180					185		
ggg	gcg	cta	caa	cga	gac	ccc	ctg	ctg	cag	cca	ggc	cgg	ggg	cag	atc	749
Gly	Ala	Leu	Gln	Arg	Asp	Pro	Leu	Leu	Gln	Pro	Gly	Arg	Gly	Gln	Ile	
			190				195						200			
atg	aag	gtg	gac	gcc	cct	tgg	atg	aag	cac	ttc	att	ctc	acc	cat	gac	797
Met	Lys	Val	Asp	Ala	Pro	Trp	Met	Lys	His	Phe	Ile	Leu	Thr	His	Asp	
		205					210					215				
cca	gag	aga	ggc	atc	tac	aat	tcc	ccg	tac	atc	atc	cca	ggg	acc	cag	845
Pro	Glu	Arg	Gly	Ile	Tyr	Asn	Ser	Pro	Tyr	Ile	Ile	Pro	Gly	Thr	Gln	
		220				225					230					
aca	gtt	act	ctt	gga	ggc	atc	ttc	cag	ttg	gga	aac	tgg	agt	gaa	cta	893
Thr	Val	Thr	Leu	Gly	Gly	Ile	Phe	Gln	Leu	Gly	Asn	Trp	Ser	Glu	Leu	
235				240						245					250	
aac	aat	atc	cag	gac	cac	aac	acc	att	tgg	gaa	ggc	tgc	tgc	aga	ctg	941
Asn	Asn	Ile	Gln													



```

gccaatgaat caatgtgctc cttcataagc cattgcttct ccctcacttc tttcctcaaa 1297
gaagcatgag gtgagagaaa gccacaaagt cagtgccttg agaagggttc agcccaacat 1357
ggggcccttc tcatcactga aatccctcta ccttctctgg gtctggcatt ataaagaaca 1417
gctgaggctg tcattccatg agtcttcaga agaaaggaca gctcagaaaa tcaaagaggc 1477
caactgccc gagccacaga aaatggagga taattgaggc taagtaacct gattacaagt 1537
tgtactaaca tattaaggt tctgaaaagt cctgcagcaa agacaactat ctgatgttgt 1597
ttaacccagt gcttgctaaa cctatctggc tatggaactc ttttgcccag agcaccatg 1657
aatgccatga cacaaatctg agaaaatgct ggaa 1691

```

```

<210> 4
<211> 2620
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> 5'UTR
<222> 1..1155

```

```

<220>
<221> CDS
<222> 1156..1818

```

```

<220>
<221> 3'UTR
<222> 1819..2620

```

```

<400> 4
gaaacccacg cagcctcctg gattcttccc cgtccctccc tctgtcctgg ggctgtgacc 60
tcttccatgt tattcacagg gtctcagcac gattcatctc aaagcagcga aacaagcact 120
ggcctcagaa gaagcaatat taaaacagtt acaactcatc tagcgcacag acaccaact 180
gacaccctgt tcctccagtc ataacaacaa ctacagcttt gattgaacaa gagactgagt 240
ttggtaactt tctcctaata aaaagatcac tgactatgga ctgcttctgg tggggttacg 300
aaaccgcaac ctcatgtgcc tgcatttctt gaaaagacat tttgatgtag gaagggcctg 360
gagtctctgt gcttgctgtc ctgggatacg ggagcaaaga gccacgcac ctcattggccc 420
acacagggct cacctccagt ctctccttgg cctcatctcc ccagcgtcct ggaatggcat 480
cgggctggcc caggagagccc ctgtcctgtg cctctccttt cccctcaggg gctgccaggc 540
tgaccacccc caccgcaggc caggcctaca gtgccccatg gaacgtcctg accctcccc 600
agggtggcag caggaagaag gaagaaaagg gacccctccc agctggccag agagacagac 660
cttcttgtgc tcatcaaccc tccaagaatg cctgcccctc ctccctcccc caaggcctgt 720
ccacaggggc ttgagatcag ccagaaaagt caggcaactt ttcagggaact gggagcgagg 780
tctcccggcc gggcctgggt ccagtctctg tgggcagtgc agtgccgagc cccaccctc 840
aagccgtgcc ctgtccatag ctccagactt tgaccctgca ctccagtcog ggctggcgga 900
cagagggctg gaaacaagac gctccagaat caggagcttc cctcaggaa atagcatcct 960
gtgtccccgc actgcagtgt tctggtctct ccagcagttt ggtacttccg atgaagagct 1020
tgtgtctcca gaggcaaagt atgggggaag agggaagaga gaagaccaag ggtccctgag 1080
aggggctgtc ccctaagccc cagtatccaa gctcgggctc gaagctggaa ggagaattgc 1140
ctagaggctg ctgca atg cgt gtg gtg gtg att gga gca gga gtc atc ggg 1191
Met Arg Val Val Val Ile Gly Ala Gly Val Ile Gly
1 5 10
ctg tcc acc gcc ctg tgc atc cat gag cgc tac cac tca gtc ctg cag 1239
Leu Ser Thr Ala Leu Cys Ile His Glu Arg Tyr His Ser Val Leu Gln
15 20 25
cca ctg gac ata aag gtc tac gcg gac cgc ttc acc cca ctg acc acc 1287
Pro Leu Asp Ile Lys Val Tyr Ala Asp Arg Phe Thr Pro Leu Thr Thr
30 35 40
acc gac gtg gct gcc ggc ctg tgg cag ccc tac ctt tct gac ccc aac 1335
Thr Asp Val Ala Ala Gly Leu Trp Gln Pro Tyr Leu Ser Asp Pro Asn
45 50 55 60
aac cca cag gag gcg gac tgg agc caa cag acc ttt gac tat ctg ctg 1383

```

Asn	Pro	Gln	Glu	Ala	Asp	Trp	Ser	Gln	Gln	Thr	Phe	Asp	Tyr	Leu	Leu	
				65					70					75		
agc	cat	gtc	cat	tct	ccc	aac	gct	gaa	aac	ctg	ggc	ctg	ttc	cta	atc	1431
Ser	His	Val	His	Ser	Pro	Asn	Ala	Glu	Asn	Leu	Gly	Leu	Phe	Leu	Ile	
			80					85					90			
tcg	ggc	tac	aac	ctc	ttc	cat	gaa	gcc	att	ccg	gac	cct	tcc	tgg	aag	1479
Ser	Gly	Tyr	Asn	Leu	Phe	His	Glu	Ala	Ile	Pro	Asp	Pro	Ser	Trp	Lys	
		95					100					105				
gac	aca	gtt	ctg	gga	ttt	cgg	aag	ctg	acc	ccc	aga	gag	ctg	gat	atg	1527
Asp	Thr	Val	Leu	Gly	Phe	Arg	Lys	Leu	Thr	Pro	Arg	Glu	Leu	Asp	Met	
	110					115					120					
ttc	cca	gat	tac	ggc	tat	ggc	tgg	ttc	cac	aca	agc	cta	att	ctg	gag	1575
Phe	Pro	Asp	Tyr	Gly	Tyr	Gly	Trp	Phe	His	Thr	Ser	Leu	Ile	Leu	Glu	
125					130					135					140	
gga	aag	aac	tat	cta	cag	tgg	ctg	act	gaa	agg	tta	act	gag	agg	gga	1623
Gly	Lys	Asn	Tyr	Leu	Gln	Trp	Leu	Thr	Glu	Arg	Leu	Thr	Glu	Arg	Gly	
				145					150					155		
gtg	aag	ttc	ttc	cag	cgg	aaa	gtg	gag	tct	ttt	gag	gag	gtg	gca	aga	1671
Val	Lys	Phe	Phe	Gln	Arg	Lys	Val	Glu	Ser	Phe	Glu	Glu	Val	Ala	Arg	
			160					165						170		
gaa	ggc	gca	gac	gtg	att	gtc	aac	tgc	act	ggg	gta	tgg	gct	ggg	gcg	1719
Glu	Gly	Ala	Asp	Val	Ile	Val	Asn	Cys	Thr	Gly	Val	Trp	Ala	Gly	Ala	
		175					180					185				
cta	caa	cga	gac	ccc	ctg	ctg	cag	cca	ggc	cgg	ggg	cag	atc	atg	aag	1767
Leu	Gln	Arg	Asp	Pro	Leu	Leu	Gln	Pro	Gly	Arg	Gly	Gln	Ile	Met	Lys	
	190					195					200					
gac	cca	gac	agt	tac	tct	tgg	agg	cat	ctt	cca	gtt	ggg	aaa	ctg	gag	1815
Asp	Pro	Asp	Ser	Tyr	Ser	Trp	Arg	His	Leu	Pro	Val	Gly	Lys	Leu	Glu	
205					210					215				220		
tga	actaaacaat	atccaggacc	acaacacccat	ttgggaaggc	tgctgcagac											1868
*																
tggagcccac	actgaagaat	gcaagaatta	ttggtgaacg	aactggcttc	cggccagtac											1928
gccccagat	tcggctagaa	agagaacagc	ttcgactgg	accttcaaac	acagaggtca											1988
tccacaacta	tggccatgga	ggctacgggc	tcaccatcca	ctggggatgt	gccctggagg											2048
cagccaagct	ctttgggaga	atcctggaag	aaaagaaatt	gtccagaatg	ccaccatccc											2108
acctctgaag	actccagtga	ctgctgcctc	ccccacaaag	aactcccttc	tcccctcagc											2168
caatgaatca	atgtgctcct	tcataagcca	ttgcttctcc	ctcacttctt	tcctcaaaga											2228
agcatgaggt	gagagaaagc	cacaaagtca	gtgcctggag	aagggttcag	cccaacatgg											2288
ggccccctctc	atcactgaaa	tccctctacc	ttctctgggt	ctggcattat	aaagaacagc											2348
tgaggctgtc	attccatgag	tcttcagaag	aaaggacagc	tcagaaaatc	aaagaggcca											2408
actgcccaga	gccacagaaa	atggaggata	attgaggeta	agtaacctga	ttacaagttg											2468
tactaacata	ttaaagggtc	tgaaaagtcc	tgcagcaaag	acaactatct	gatgttggtt											2528
aacccagtgc	ttgctaaacc	tatctggcta	tggaaactct	ttgcccagag	cacccatgaa											2588
tgccatgaca	caaatctgag	aaaatgctgg	aa													2620

<210> 5  
 <211> 1576  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> 5'UTR  
 <222> 1..143

<220>  
 <221> CDS  
 <222> 144..380

<220>

<221> 3'UTR  
 <222> 381..1576

<400> 5  
 tgcactccag tccgggctgg cggacagagg gctggaaaaca agacgctcca gaatcaggag 60  
 cttccctca ggaaatagca tctgtgtcc ccgactgca gttgtctggt ctctccagca 120  
 gtttgggtact tccggctgct gca atg cgt gtg gtg gtg att gga gca gga gtc 173  
 Met Arg Val Val Val Ile Gly Ala Gly Val  
 1 5 10  
 atc ggg ctg tcc acc gcc ctc tgc atc cat gag cgc tac cac tca gtc 221  
 Ile Gly Leu Ser Thr Ala Leu Cys Ile His Glu Arg Tyr His Ser Val  
 15 20 25  
 ctg cag cca ctg gac ata aag gtc tac gcg gac cgc ttc acc cca ctc 269  
 Leu Gln Pro Leu Asp Ile Lys Val Tyr Ala Asp Arg Phe Thr Pro Leu  
 30 35 40  
 acc acc acc gac gtg gct gcc ggc ctc tgg cag ccc tac ctt tct gac 317  
 Thr Thr Thr Asp Val Ala Ala Gly Leu Trp Gln Pro Tyr Leu Ser Asp  
 45 50 55  
 ccc aac aac cca cag gag gcg acc ctt cct gga agg aca cag ttc tgg 365  
 Pro Asn Asn Pro Gln Glu Ala Thr Leu Pro Gly Arg Thr Gln Phe Trp  
 60 65 70  
 gat ttc gga agc tga cccccagaga gctggatatg ttcccagatt acggctatgg 420  
 Asp Phe Gly Ser \*  
 75  
 ctggttccac acaagcctaa ttctggaggg aaagaactat ctacagtggc tgactgaaag 480  
 gttaactgag aggggagtgag agttcttcca gcggaaagtg gagtcttttg aggaggtggc 540  
 aagagaaggc gcagacgtga ttgtcaactg cactggggta tgggctgggg cgctacaacg 600  
 agacccctg ctgcagccag gccgggggca gatcatgaag gtggacgcc cttggatgaa 660  
 gcacttcatt ctcacccatg acccagagag aggcattctac aattccccgt acatcatccc 720  
 agggaccag acagttactc ttggaggcat cttccagttg ggaaactgga gtgaactaaa 780  
 caatatccag gaccacaaca ccatttggga aggctgctgc agactggagc ccacactgaa 840  
 gaatgcaaga attattggtg aacgaactgg cttccggcca gtacgcccc agattcggct 900  
 agaaagagaa cagcttcgca ctggaccttc aaacacagag gtcattccca actatggcca 960  
 tggaggctac gggctcacca tccactgggg atgtgccctg gaggcagcca agctcttttg 1020  
 gagaatcctg gaagaaaaga aattgtccag aatgccacca tcccacctct gaagactcca 1080  
 gtgactgctg cctcccccca caagaactcc cttctcccc cagccaatga atcaatgtgc 1140  
 tccttcataa gccattgctt ctcctcact tctttctcca aagaagcatg aggtgagaga 1200  
 aagccacaaa gtcagtgcct ggagaagggt tcagcccaac atggggcccc tctcatcact 1260  
 gaaatccctc taccttctct gggctctggca ttataaagaa cagctgaggc tgtcattcca 1320  
 tgagtcttca gaagaaaagg cagctcagaa aatcaaagag gccaaactgcc cagagccaca 1380  
 gaaaatggag gataattgag gctaagtaac ctgattacaa gttgtactaa catattaaag 1440  
 gttctgaaaa gtctgcagc aaagacaact atctgatgtt gtttaacca gtgcttgcta 1500  
 aacctatctg gctatggaac tcttttgccc agagcaccca tgaatgcca gacacaaatc 1560  
 tgagaaaatg ctggaa 1576

<210> 6  
 <211> 1345  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> 5'UTR  
 <222> 1..113

<220>  
 <221> CDS  
 <222> 114..959

<220>

<221> 3'UTR  
 <222> 960..1345

<220>  
 <221> polyA\_signal  
 <222> 1321..1326

<400> 6  
 gaaacccacg cagcctcctg gattcttccc cgtccctccc tctgtcctgg ggctgtgacc 60  
 tcctccatgt tattcacagg gtctcagcac gattcatctc aaaggctgct gca atg 116  
 Met  
 1  
 cgt gtg gtg gtg att gga gca gga gtc atc ggg ctg tcc acc gcc ctc 164  
 Arg Val Val Val Ile Gly Ala Gly Val Ile Gly Leu Ser Thr Ala Leu  
 5 10 15  
 tgc atc cat gag cgc tac cac tca gtc ctg cag cca ctg gac ata aag 212  
 Cys Ile His Glu Arg Tyr His Ser Val Leu Gln Pro Leu Asp Ile Lys  
 20 25 30  
 gtc tac gcg gac cgc ttc acc cca ctc acc acc acc gac gtg gct gcc 260  
 Val Tyr Ala Asp Arg Phe Thr Pro Leu Thr Thr Thr Asp Val Ala Ala  
 35 40 45  
 ggc ctc tgg cag ccc tac ctt tct gac ccc aac aac cca cag gag gcg 308  
 Gly Leu Trp Gln Pro Tyr Leu Ser Asp Pro Asn Asn Pro Gln Glu Ala  
 50 55 60 65  
 gac tgg agc caa cag acc ttt gac tat ctc ctg agc cat gtc cat tct 356  
 Asp Trp Ser Gln Gln Thr Phe Asp Tyr Leu Leu Ser His Val His Ser  
 70 75 80  
 ccc aac gct gaa aac ctg ggc ctg ttc cta atc tcg ggc tac aac ctc 404  
 Pro Asn Ala Glu Asn Leu Gly Leu Phe Leu Ile Ser Gly Tyr Asn Leu  
 85 90 95  
 ttc cat gaa gcc att ccg gtg gca aga gaa ggc gca gac gtg att gtc 452  
 Phe His Glu Ala Ile Pro Val Ala Arg Glu Gly Ala Asp Val Ile Val  
 100 105 110  
 aac tgc act ggg gta tgg gct ggg gcg cta caa cga gac ccc ctg ctg 500  
 Asn Cys Thr Gly Val Trp Ala Gly Ala Leu Gln Arg Asp Pro Leu Leu  
 115 120 125  
 cag cca ggc cgg ggg cag atc atg aag gtg gac gcc cct tgg atg aag 548  
 Gln Pro Gly Arg Gly Gln Ile Met Lys Val Asp Ala Pro Trp Met Lys  
 130 135 140 145  
 cac ttc att ctc acc cat gac cca gag aga ggc atc tac aat tcc ccg 596  
 His Phe Ile Leu Thr His Asp Pro Glu Arg Gly Ile Tyr Asn Ser Pro  
 150 155 160  
 tac atc atc cca ggg acc cag aca gtt act ctt gga ggc atc ttc cag 644  
 Tyr Ile Ile Pro Gly Thr Gln Thr Val Thr Leu Gly Gly Ile Phe Gln  
 165 170 175  
 ttg gga aac tgg agt gaa cta aac aat atc cag gac cac aac acc att 692  
 Leu Gly Asn Trp Ser Glu Leu Asn Asn Ile Gln Asp His Asn Thr Ile  
 180 185 190  
 tgg gaa ggc tgc tgc aga ctg gag ccc aca ctg aag aat gca aga att 740  
 Trp Glu Gly Cys Cys Arg Leu Glu Pro Thr Leu Lys Asn Ala Arg Ile  
 195 200 205  
 att ggt gaa cga act ggc ttc cgg cca gta cgc ccc cag att cgg cta 788  
 Ile Gly Glu Arg Thr Gly Phe Arg Pro Val Arg Pro Gln Ile Arg Leu  
 210 215 220 225  
 gaa aga gaa cag ctt cgc act gga cct tca aac aca gag gtc atc cac 836  
 Glu Arg Glu Gln Leu Arg Thr Gly Pro Ser Asn Thr Glu Val Ile His  
 230 235 240  
 aac tat ggc cat gga ggc tac ggg ctc acc atc cac tgg gga tgt gcc 884  
 Asn Tyr Gly His Gly Gly Tyr Gly Leu Thr Ile His Trp Gly Cys Ala

245	250	255	
ctg gag gca gcc aag ctc ttt ggg aga atc ctg gaa gaa aag aaa ttg			932
Leu Glu Ala Ala Lys Leu Phe Gly Arg Ile Leu Glu Glu Lys Lys Leu			
260	265	270	
tcc aga atg cca cca tcc cac ctc tga agactccagt gactgctgcc			979
Ser Arg Met Pro Pro Ser His Leu *			
275	280		
tccccccaca agaactccct tctccccctca gccaatgaat caatgtgctc cttcataagc			1039
cattgcttct ccctcacttc tttcctcaaa gaagcatgag gtgagagaaa gccacaaagt			1099
cagtgcctgg agaagggttc agcccaacat ggggcccctc tcatcactga aatccctcta			1159
ccttctctgg gtctggcatt ataaagaaca gctgaggctg tcattccatg agtcttcaga			1219
agaaaggaca gctcagaaaa tcaaagaggc caactgcca gagccacaga aaatggagga			1279
taattgaggc taagtaacct gattacaagt tgtactaaca tattaaaggt tctgaaaagt			1339
cctgca			1345

<210> 7  
 <211> 347  
 <212> PRT  
 <213> Homo sapiens

<400> 7  
 Met Arg Val Val Val Ile Gly Ala Gly Val Ile Gly Leu Ser Thr Ala  
 1 5 10 15  
 Leu Cys Ile His Glu Arg Tyr His Ser Val Leu Gln Pro Leu Asp Ile  
 20 25 30  
 Lys Val Tyr Ala Asp Arg Phe Thr Pro Leu Thr Thr Thr Asp Val Ala  
 35 40 45  
 Ala Gly Leu Trp Gln Pro Tyr Leu Ser Asp Pro Asn Asn Pro Gln Glu  
 50 55 60  
 Ala Asp Trp Ser Gln Gln Thr Phe Asp Tyr Leu Leu Ser His Val His  
 65 70 75 80  
 Ser Pro Asn Ala Glu Asn Leu Gly Leu Phe Leu Ile Ser Gly Tyr Asn  
 85 90 95  
 Leu Phe His Glu Ala Ile Pro Asp Pro Ser Trp Lys Asp Thr Val Leu  
 100 105 110  
 Gly Phe Arg Lys Leu Thr Pro Arg Glu Leu Asp Met Phe Pro Asp Tyr  
 115 120 125  
 Gly Tyr Gly Trp Phe His Thr Ser Leu Ile Leu Glu Gly Lys Asn Tyr  
 130 135 140  
 Leu Gln Trp Leu Thr Glu Arg Leu Thr Glu Arg Gly Val Lys Phe Phe  
 145 150 155 160  
 Gln Arg Lys Val Glu Ser Phe Glu Glu Val Ala Arg Glu Gly Ala Asp  
 165 170 175  
 Val Ile Val Asn Cys Thr Gly Val Trp Ala Gly Ala Leu Gln Arg Asp  
 180 185 190  
 Pro Leu Leu Gln Pro Gly Arg Gly Gln Ile Met Lys Val Asp Ala Pro  
 195 200 205  
 Trp Met Lys His Phe Ile Leu Thr His Asp Pro Glu Arg Gly Ile Tyr  
 210 215 220  
 Asn Ser Pro Tyr Ile Ile Pro Gly Thr Gln Thr Val Thr Leu Gly Gly  
 225 230 235 240  
 Ile Phe Gln Leu Gly Asn Trp Ser Glu Leu Asn Asn Ile Gln Asp His  
 245 250 255  
 Asn Thr Ile Trp Glu Gly Cys Cys Arg Leu Glu Pro Thr Leu Lys Asn  
 260 265 270  
 Ala Arg Ile Ile Gly Glu Arg Thr Gly Phe Arg Pro Val Arg Pro Gln  
 275 280 285  
 Ile Arg Leu Glu Arg Glu Gln Leu Arg Thr Gly Pro Ser Asn Thr Glu  
 290 295 300

Val Ile His Asn Tyr Gly His Gly Gly Tyr Gly Leu Thr Ile His Trp  
 305 310 315 320  
 Gly Cys Ala Leu Glu Ala Ala Lys Leu Phe Gly Arg Ile Leu Glu Glu  
 325 330 335  
 Lys Lys Leu Ser Arg Met Pro Pro Ser His Leu  
 340 345

<210> 8  
 <211> 220  
 <212> PRT  
 <213> Homo sapiens

<400> 8  
 Met Arg Val Val Val Ile Gly Ala Gly Val Ile Gly Leu Ser Thr Ala  
 1 5 10 15  
 Leu Cys Ile His Glu Arg Tyr His Ser Val Leu Gln Pro Leu Asp Ile  
 20 25 30  
 Lys Val Tyr Ala Asp Arg Phe Thr Pro Leu Thr Thr Thr Asp Val Ala  
 35 40 45  
 Ala Gly Leu Trp Gln Pro Tyr Leu Ser Asp Pro Asn Asn Pro Gln Glu  
 50 55 60  
 Ala Asp Trp Ser Gln Gln Thr Phe Asp Tyr Leu Leu Ser His Val His  
 65 70 75 80  
 Ser Pro Asn Ala Glu Asn Leu Gly Leu Phe Leu Ile Ser Gly Tyr Asn  
 85 90 95  
 Leu Phe His Glu Ala Ile Pro Asp Pro Ser Trp Lys Asp Thr Val Leu  
 100 105 110  
 Gly Phe Arg Lys Leu Thr Pro Arg Glu Leu Asp Met Phe Pro Asp Tyr  
 115 120 125  
 Gly Tyr Gly Trp Phe His Thr Ser Leu Ile Leu Glu Gly Lys Asn Tyr  
 130 135 140  
 Leu Gln Trp Leu Thr Glu Arg Leu Thr Glu Arg Gly Val Lys Phe Phe  
 145 150 155 160  
 Gln Arg Lys Val Glu Ser Phe Glu Glu Val Ala Arg Glu Gly Ala Asp  
 165 170 175  
 Val Ile Val Asn Cys Thr Gly Val Trp Ala Gly Ala Leu Gln Arg Asp  
 180 185 190  
 Pro Leu Leu Gln Pro Gly Arg Gly Gln Ile Met Lys Asp Pro Asp Ser  
 195 200 205  
 Tyr Ser Trp Arg His Leu Pro Val Gly Lys Leu Glu  
 210 215 220

<210> 9  
 <211> 78  
 <212> PRT  
 <213> Homo sapiens

<400> 9  
 Met Arg Val Val Val Ile Gly Ala Gly Val Ile Gly Leu Ser Thr Ala  
 1 5 10 15  
 Leu Cys Ile His Glu Arg Tyr His Ser Val Leu Gln Pro Leu Asp Ile  
 20 25 30  
 Lys Val Tyr Ala Asp Arg Phe Thr Pro Leu Thr Thr Thr Asp Val Ala  
 35 40 45  
 Ala Gly Leu Trp Gln Pro Tyr Leu Ser Asp Pro Asn Asn Pro Gln Glu  
 50 55 60  
 Ala Thr Leu Pro Gly Arg Thr Gln Phe Trp Asp Phe Gly Ser  
 65 70 75

<210> 10  
 <211> 281  
 <212> PRT  
 <213> Homo sapiens

<400> 10  
 Met Arg Val Val Val Ile Gly Ala Gly Val Ile Gly Leu Ser Thr Ala  
 1 5 10 15  
 Leu Cys Ile His Glu Arg Tyr His Ser Val Leu Gln Pro Leu Asp Ile  
 20 25 30  
 Lys Val Tyr Ala Asp Arg Phe Thr Pro Leu Thr Thr Thr Asp Val Ala  
 35 40 45  
 Ala Gly Leu Trp Gln Pro Tyr Leu Ser Asp Pro Asn Asn Pro Gln Glu  
 50 55 60  
 Ala Asp Trp Ser Gln Gln Thr Phe Asp Tyr Leu Leu Ser His Val His  
 65 70 75 80  
 Ser Pro Asn Ala Glu Asn Leu Gly Leu Phe Leu Ile Ser Gly Tyr Asn  
 85 90 95  
 Leu Phe His Glu Ala Ile Pro Val Ala Arg Glu Gly Ala Asp Val Ile  
 100 105 110  
 Val Asn Cys Thr Gly Val Trp Ala Gly Ala Leu Gln Arg Asp Pro Leu  
 115 120 125  
 Leu Gln Pro Gly Arg Gly Gln Ile Met Lys Val Asp Ala Pro Trp Met  
 130 135 140  
 Lys His Phe Ile Leu Thr His Asp Pro Glu Arg Gly Ile Tyr Asn Ser  
 145 150 155 160  
 Pro Tyr Ile Ile Pro Gly Thr Gln Thr Val Thr Leu Gly Gly Ile Phe  
 165 170 175  
 Gln Leu Gly Asn Trp Ser Glu Leu Asn Asn Ile Gln Asp His Asn Thr  
 180 185 190  
 Ile Trp Glu Gly Cys Cys Arg Leu Glu Pro Thr Leu Lys Asn Ala Arg  
 195 200 205  
 Ile Ile Gly Glu Arg Thr Gly Phe Arg Pro Val Arg Pro Gln Ile Arg  
 210 215 220  
 Leu Glu Arg Glu Gln Leu Arg Thr Gly Pro Ser Asn Thr Glu Val Ile  
 225 230 235 240  
 His Asn Tyr Gly His Gly Gly Tyr Gly Leu Thr Ile His Trp Gly Cys  
 245 250 255  
 Ala Leu Glu Ala Ala Lys Leu Phe Gly Arg Ile Leu Glu Glu Lys Lys  
 260 265 270  
 Leu Ser Arg Met Pro Pro Ser His Leu  
 275 280

<210> 11  
 <211> 456  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> allele  
 <222> 152  
 <223> 99-16105-152 : polymorphic base A or G

<220>  
 <221> misc\_binding  
 <222> 140..164  
 <223> 99-16105-152.probe

<220>

<221> primer\_bind  
 <222> 133..151  
 <223> 99-16105-152.mis

<220>  
 <221> primer\_bind  
 <222> 153..171  
 <223> 99-16105-152.mis complement

<220>  
 <221> primer\_bind  
 <222> 1..19  
 <223> 99-16105.pu

<220>  
 <221> primer\_bind  
 <222> 437..456  
 <223> 99-16105.rp complement

<400> 11  
 cgctttgttg tattctttgt tatttatcca ttttgccaaa ttatctgcaa gtagaaatat 60  
 cgaaataaga agctcttttag caatttactt tggatattgg ttttcttttg aaggacagtt 120  
 attaaaaatag cttgtaggat tactcatttt crtthtttctt cttttttaa ataaagcaat 180  
 gtcatacttt ttttccctgt attatatttc tcctcaataa ttgatatgct acattaaagg 240  
 aacacaaaat ggtcttaatt atgcaataat gatcaaggca aagagtgttt cctgggaact 300  
 aatgggtgcc tgagaggagg tgatggcttg aggtccagct ggttattaag ccgcaggaaa 360  
 tgctgcaggc caagatttgt attatttctc tgagatgaaa atgaacccaa aaaaaggcaa 420  
 aatgggtttt tctccactaa tgggtaaaat gaactc 456

<210> 12  
 <211> 463  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> allele  
 <222> 215  
 <223> 99-5919-215 : polymorphic base A or G

<220>  
 <221> misc\_binding  
 <222> 203..227  
 <223> 99-5919-215.probe

<220>  
 <221> primer\_bind  
 <222> 196..214  
 <223> 99-5919-215.mis

<220>  
 <221> primer\_bind  
 <222> 216..234  
 <223> 99-5919-215.mis complement

<220>  
 <221> primer\_bind  
 <222> 11..29  
 <223> 99-5919.pu



<220>  
 <221> primer\_bind  
 <222> 445..465  
 <223> 99-5919.rp complement

<400> 12  
 tttctcttga ctacagcaat gcagatttca attctgccat tgaattcca gacatattcg 60  
 tcatcccat tttcatccc caccaccctg ccattttctt cgtgttaact tgttttcctg 120  
 actcacagaa atcacctttt cctgtataca tttttaggat gtcagacttt attctaata 180  
 tttctcctag ttgcccccca aaattgtatt ctacrgtgtg attttaagc tgaattttca 240  
 agatgatatt tcatatctat attttcacaa gcttttcttc tatgaatgtt attgtcagct 300  
 gtcagggtgt gagatgggtac ttgatactac attctttcca agctggtgcc tgaatcggtt 360  
 taagacaaag tcattactag gctgtaaact gttgctctgc aaaattgagc agcacgtatt 420  
 taaccactca tacttcttag ctctccaaca ctttgagtcr ata 463

<210> 13  
 <211> 742  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> 5'UTR  
 <222> 1..46

<220>  
 <221> CDS  
 <222> 47..508

<220>  
 <221> 3'UTR  
 <222> 509..742

<220>  
 <221> polyA\_signal  
 <222> 718..723

<220>  
 <221> allele  
 <222> 21  
 <223> 8-135-112 : polymorphic base C or T

<220>  
 <221> allele  
 <222> 75  
 <223> 8-135-166 : polymorphic base A or C

<220>  
 <221> allele  
 <222> 135  
 <223> 99-16038-118 : polymorphic base A or G

<220>  
 <221> allele  
 <222> 194  
 <223> 8-137-152 : polymorphic base G or T

<220>  
 <221> allele  
 <222> 224

<223> 8-137-182 : polymorphic base A or G

<220>

<221> allele

<222> 390

<223> 8-130-220 : polymorphic base A or C

<220>

<221> allele

<222> 406

<223> 8-130-236 : polymorphic base A or G

<220>

<221> allele

<222> 578

<223> 8-131-199 : polymorphic base A or C

<220>

<221> allele

<222> 641

<223> 8-132-97 : polymorphic base C or T

<220>

<221> allele

<222> 708

<223> 8-132-164 : polymorphic base C or T

<220>

<221> allele

<222> 723

<223> 8-132-179 : polymorphic base A or T

<400> 13

tcattctctgc ttcacaatgc ygatgattta gctgggagga cccaaa atg ctg gaa 55  
Met Leu Glu

aag ctg atg ggt gct gat tmt ctc cag ctt ttc aga tcc aga tat aca 103  
Lys Leu Met Gly Ala Asp Xaa Leu Gln Leu Phe Arg Ser Arg Tyr Thr

ttg ggt aaa atc tac ttc ata ggt ttt caa arg agc att ctt ctg agc 151  
Leu Gly Lys Ile Tyr Phe Ile Gly Phe Gln Xaa Ser Ile Leu Leu Ser

aaa tct gaa aac tct cta aac tct att gca aag gag aca gaa kaa gga 199  
Lys Ser Glu Asn Ser Leu Asn Ser Ile Ala Lys Glu Thr Glu Xaa Gly

aga gag acg gta aca agg aaa gaa rga tgg aag aga agg cat gag gac 247  
Arg Glu Thr Val Thr Arg Lys Glu Xaa Trp Lys Arg Arg His Glu Asp

ggc tat ttg gaa atg gca cag agg cat tta cag aga tca tta tgt cct 295  
Gly Tyr Leu Glu Met Ala Gln Arg His Leu Gln Arg Ser Leu Cys Pro

tgg gtc tct tac ctt cct cag ccc tat gca gag ctt gaa gaa gta agc 343  
Trp Val Ser Tyr Leu Pro Gln Pro Tyr Ala Glu Leu Glu Glu Val Ser

agc cat gtt gga aaa gtc ttc atg gca aga aac tat gag ttc ctt gmc 391  
Ser His Val Gly Lys Val Phe Met Ala Arg Asn Tyr Glu Phe Leu Xaa

tat gag gcc tct aar gac cgc agg cag cct cta gaa cga atg tgg acc 439  
Tyr Glu Ala Ser Lys Asp Arg Arg Gln Pro Leu Glu Arg Met Trp Thr

	120	125	130	
tgc aac tac aac cag caa aaa gac cag tca tgc aac cac aag gaa ata				487
Cys Asn Tyr Asn Gln Gln Lys Asp Gln Ser Cys Asn His Lys Glu Ile				
	135	140	145	
act tct acc aaa gct gaa tga gtttggaagc agattcttcc cagccaatcc				538
Thr Ser Thr Lys Ala Glu *				
	150			
ttctgatgac aatgtagtct ggccaacatc ttcactggam tctgacggac tctgtgtctg				598
ggaccagct gataacacgt ggtgatggga ttgtatttgc aaytctctgg tcagtaagtg				658
ataaaatgcc atttctatgc acccacctgg cctgtgtgac tgggagaaty tctcttttta				718
ttaawtgtgc ttcaagtttt aaca				742

<210> 14  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

<400> 14

Met	Leu	Glu	Lys	Leu	Met	Gly	Ala	Asp	Xaa	Leu	Gln	Leu	Phe	Arg	Ser
1			5						10					15	
Arg	Tyr	Thr	Leu	Gly	Lys	Ile	Tyr	Phe	Ile	Gly	Phe	Gln	Xaa	Ser	Ile
			20					25					30		
Leu	Leu	Ser	Lys	Ser	Glu	Asn	Ser	Leu	Asn	Ser	Ile	Ala	Lys	Glu	Thr
			35				40					45			
Glu	Xaa	Gly	Arg	Glu	Thr	Val	Thr	Arg	Lys	Glu	Xaa	Trp	Lys	Arg	Arg
	50					55					60				
His	Glu	Asp	Gly	Tyr	Leu	Glu	Met	Ala	Gln	Arg	His	Leu	Gln	Arg	Ser
65					70				75					80	
Leu	Cys	Pro	Trp	Val	Ser	Tyr	Leu	Pro	Gln	Pro	Tyr	Ala	Glu	Leu	Glu
				85					90					95	
Glu	Val	Ser	Ser	His	Val	Gly	Lys	Val	Phe	Met	Ala	Arg	Asn	Tyr	Glu
			100				105						110		
Phe	Leu	Xaa	Tyr	Glu	Ala	Ser	Lys	Asp	Arg	Arg	Gln	Pro	Leu	Glu	Arg
		115					120				125				
Met	Trp	Thr	Cys	Asn	Tyr	Asn	Gln	Gln	Lys	Asp	Gln	Ser	Cys	Asn	His
	130					135					140				
Lys	Glu	Ile	Thr	Ser	Thr	Lys	Ala	Glu							
145						150									

<210> 15  
 <211> 476  
 <212> DNA  
 <213> Homo sapiens

<400> 15

cat	gag	gac	ggc	tat	ttg	gaa	atg	gca	cag	agg	cat	tta	cag	aga	tca
1			5					10					15		
His	Glu	Asp	Gly	Tyr	Leu	Glu	Met	Ala	Gln	Arg	His	Leu	Gln	Arg	Ser
tta	tgt	cct	tgg	gtc	tct	tac	ctt	cct	cag	ccc	tat	gca	gag	ctt	gaa
Leu	Cys	Pro	Trp	Val	Ser	Tyr	Leu	Pro	Gln	Pro	Tyr	Ala	Glu	Leu	Glu
			20					25				30			
gaa	gta	agc	agc	cat	gtt	gga	aaa	gtc	ttc	atg	gca	aga	aac	tat	gag
Glu	Val	Ser	Ser	His	Val	Gly	Lys	Val	Phe	Met	Ala	Arg	Asn	Tyr	Glu
		35				40					45				
ttc	ctt	gcc	tat	gag	gcc	tct	aag	gac	cgc	agg	cag	cct	cta	gaa	cga
Phe	Leu	Ala	Tyr	Glu	Ala	Ser	Lys	Asp	Arg	Arg	Gln	Pro	Leu	Glu	Arg
	50					55					60				
atg	tgg	acc	tgc	aac	tac	aac	cag	caa	aaa	gac	cag	tca	tgc	aac	cac
Met	Trp	Thr	Cys	Asn	Tyr	Asn	Gln	Gln	Lys	Asp	Gln	Ser	Cys	Asn	His

65	70	75	80	
aag gaa ata act tct acc aaa gct gaa tga gtttggaagc agattcttcc				290
Lys Glu Ile Thr Ser Thr Lys Ala Glu *				
	85	90		
cagccaatcc ttctgatgac aatgtagtct ggccaacatc ttcactggac tctgacggac				350
tctgtgtctg ggaccagct gataaacacgt ggtgatggga ttgtatttgc aactctctgg				410
tcagtaagtg ataaaatgcc atttctatgc acccacctgg cctgtgtgac tgggagaatc				470
tctctt				476

<210> 16  
 <211> 89  
 <212> PRT  
 <213> Homo sapiens

<400> 16  
 His Glu Asp Gly Tyr Leu Glu Met Ala Gln Arg His Leu Gln Arg Ser  
 1 5 10 15  
 Leu Cys Pro Trp Val Ser Tyr Leu Pro Gln Pro Tyr Ala Glu Leu Glu  
 20 25 30  
 Glu Val Ser Ser His Val Gly Lys Val Phe Met Ala Arg Asn Tyr Glu  
 35 40 45  
 Phe Leu Ala Tyr Glu Ala Ser Lys Asp Arg Arg Gln Pro Leu Glu Arg  
 50 55 60  
 Met Trp Thr Cys Asn Tyr Asn Gln Gln Lys Asp Gln Ser Cys Asn His  
 65 70 75 80  
 Lys Glu Ile Thr Ser Thr Lys Ala Glu  
 85

<210> 17  
 <211> 1633  
 <212> DNA  
 <213> Homo sapiens

<400> 17  
 ttgggggtcca ttgcaacccg aggcgagact agagtccca agcgagaagg gaagaggcag 60  
 tgggtgcacg tggaaggcgg acagagggct ggaaacaaga cgctccagaa tcaggagctt 120  
 cccctcagga aatagcatcc tgtgtccccg cactgcagtt gtctgggtctc tccagcagtt 180  
 tggtacttcc ggctgctgca atg cgt gtg gtg gtg att gga gca gga gtc atc 233  
 Met Arg Val Val Val Ile Gly Ala Gly Val Ile  
 1 5 10  
 ggg ctg tcc acc gcc ctc tgc atc cat gag cgc tac cac tca gtc ctg 281  
 Gly Leu Ser Thr Ala Leu Cys Ile His Glu Arg Tyr His Ser Val Leu  
 15 20 25  
 cag cca ctg cac ata aag gtc tac gcg gac cgc ttc acc cca ctc acc 329  
 Gln Pro Leu His Ile Lys Val Tyr Ala Asp Arg Phe Thr Pro Leu Thr  
 30 35 40  
 acc acc gac gtg gct gcc ggc ctc tgg cag ccc tac ctt tct gac ccc 377  
 Thr Thr Asp Val Ala Ala Gly Leu Trp Gln Pro Tyr Leu Ser Asp Pro  
 45 50 55  
 aac aac cca cag gag gcg gac tgg agc caa cag acc ttt gac tat ctc 425  
 Asn Asn Pro Gln Glu Ala Asp Trp Ser Gln Gln Thr Phe Asp Tyr Leu  
 60 65 70 75  
 ctg agc cat gtc cat tct ccc aac gct gaa aac ctg ggc ctg ttc cta 473  
 Leu Ser His Val His Ser Pro Asn Ala Glu Asn Leu Gly Leu Phe Leu  
 80 85 90  
 atc tcg ggc tac aac ctc ttc cat gaa gcc att ccg gac cct tcc tgg 521  
 Ile Ser Gly Tyr Asn Leu Phe His Glu Ala Ile Pro Asp Pro Ser Trp  
 95 100 105  
 aag gac aca gtt ctg gga ttt cgg aag ctg acc ccc aga gag ctg gat 569

Lys	Asp	Thr	Val	Leu	Gly	Phe	Arg	Lys	Leu	Thr	Pro	Arg	Glu	Leu	Asp	
	110						115					120				
atg	ttc	cca	gat	tac	ggc	tat	ggc	tgg	ttc	cac	aca	agc	cta	att	ctg	617
Met	Phe	Pro	Asp	Tyr	Gly	Tyr	Gly	Trp	Phe	His	Thr	Ser	Leu	Ile	Leu	
	125					130					135					
gag	gga	aag	aac	tat	cta	cag	tgg	ctg	act	gaa	agg	tta	act	gag	agg	665
Glu	Gly	Lys	Asn	Tyr	Leu	Gln	Trp	Leu	Thr	Glu	Arg	Leu	Thr	Glu	Arg	
	140				145					150					155	
gga	gtg	aag	ttc	ttc	cag	cgg	aaa	gtg	gag	tct	ttt	gag	gag	gtg	gca	713
Gly	Val	Lys	Phe	Phe	Gln	Arg	Lys	Val	Glu	Ser	Phe	Glu	Glu	Val	Ala	
			160					165						170		
aga	gaa	ggc	gca	gac	gtg	att	gtc	aac	tgc	act	ggg	gta	tgg	gct	ggg	761
Arg	Glu	Gly	Ala	Asp	Val	Ile	Val	Asn	Cys	Thr	Gly	Val	Trp	Ala	Gly	
		175					180					185				
gcg	cta	caa	cga	gac	ccc	ctg	ctg	cag	cca	ggc	cgg	ggg	cag	atc	atg	809
Ala	Leu	Gln	Arg	Asp	Pro	Leu	Leu	Gln	Pro	Gly	Arg	Gly	Gln	Ile	Met	
	190					195					200					
aag	gtg	gac	gcc	cct	tgg	atg	aag	cac	ttc	att	ctc	acc	cat	gac	cca	857
Lys	Val	Asp	Ala	Pro	Trp	Met	Lys	His	Phe	Ile	Leu	Thr	His	Asp	Pro	
	205				210						215					
gag	aga	ggc	atc	tac	aat	tcc	ccg	tac	atc	atc	cca	ggg	acc	cag	aca	905
Glu	Arg	Gly	Ile	Tyr	Asn	Ser	Pro	Tyr	Ile	Ile	Pro	Gly	Thr	Gln	Thr	
	220				225				230					235		
gtt	act	ctt	gga	ggc	atc	ttc	cag	ttg	gga	aac	tgg	agt	gaa	cta	aac	953
Val	Thr	Leu	Gly	Gly	Ile	Phe	Gln	Leu	Gly	Asn	Trp	Ser	Glu	Leu	Asn	
			240					245						250		
aat	atc	cag	gac	cac	aac	acc	att	tgg	gaa	ggc	tgc	tgc	aga	ctg	gag	1001
Asn	Ile	Gln	Asp	His	Asn	Thr	Ile	Trp	Glu	Gly	Cys	Cys	Arg	Leu	Glu	
	255						260						265			
ccc	aca	ctg	aag	aat	gca	aga	att	ggg	gaa	gca	act	ggc	ttc	cgg		1049
Pro	Thr	Leu	Lys	Asn	Ala	Arg	Ile	Ile	Gly	Glu	Ala	Thr	Gly	Phe	Arg	
	270					275					280					
cca	gta	cgc	ccc	cag	att	cgg	cta	gaa	aga	gaa	cag	ctt	cgc	act	gga	1097
Pro	Val	Arg	Pro	Gln	Ile	Arg	Leu	Glu	Arg	Glu	Gln	Leu	Arg	Thr	Gly	
	285					290					295					
cct	tca	aac	aca	gag	gtc	atc	cac	aac	tat	ggc	cat	gga	ggc	tac	ggg	1145
Pro	Ser	Asn	Thr	Glu	Val	Ile	His	Asn	Tyr	Gly	His	Gly	Gly	Tyr	Gly	
	300			305					310					315		
ctc	acc	atc	cac	tgg	gga	tgt	gcc	ctg	gag	gca	gcc	aag	ctc	ttt	ggg	1193
Leu	Thr	Ile	His	Trp	Gly	Cys	Ala	Leu	Glu	Ala	Ala	Lys	Leu	Phe	Gly	
			320					325						330		
aga	atc	ctg	gaa	gaa	aag	aaa	ttg	tcc	aga	atg	cca	cca	tcc	cac	ctc	1241
Arg	Ile	Leu	Glu	Glu	Lys	Lys	Leu	Ser	Arg	Met	Pro	Pro	Ser	His	Leu	
	335						340				345					
tga	agactccagt	gactgctgcc	tccccccaca	agaactccct	tctccccctca											1294
*																
gccaatgaat	caatgtgctc	cttcataagc	cattgcttct	ccctcacttc	tttcctcaaa											1354
gaagcatgag	gtgagagaaa	gccacraagt	cagtgcctgg	agaagggttc	agcccaacat											1414
ggggcccttc	tcactactga	aatccctcta	ccttctctgg	gtctggcatt	ataaagaaca											1474
gctgaggtcg	tcattccatg	agtcttcaga	agaaaggaca	gctcagaaag	tcaaagaggc											1534
caactgcccc	gagccacaga	aaatggagga	taattgaggc	taagtaacct	gattacaagt											1594
tgtactaaca	tattaaaggt	tctgaaaagt	cctgcaaaa													1633

<210> 18  
 <211> 347  
 <212> PRT  
 <213> Homo sapiens

<400> 18

Met Arg Val Val Val Ile Gly Ala Gly Val Ile Gly Leu Ser Thr Ala  
 1 5 10 15  
 Leu Cys Ile His Glu Arg Tyr His Ser Val Leu Gln Pro Leu Asp Ile  
 20 25 30  
 Lys Val Tyr Ala Asp Arg Phe Thr Pro Leu Thr Thr Thr Asp Val Ala  
 35 40 45  
 Ala Gly Leu Trp Gln Pro Tyr Leu Ser Asp Pro Asn Asn Pro Gln Glu  
 50 55 60  
 Ala Asp Trp Ser Gln Gln Thr Phe Asp Tyr Leu Leu Ser His Val His  
 65 70 75 80  
 Ser Pro Asn Ala Glu Asn Leu Gly Leu Phe Leu Ile Ser Gly Tyr Asn  
 85 90 95  
 Leu Phe His Glu Ala Ile Pro Asp Pro Ser Trp Lys Asp Thr Val Leu  
 100 105 110  
 Gly Phe Arg Lys Leu Thr Pro Arg Glu Leu Asp Met Phe Pro Asp Tyr  
 115 120 125  
 Gly Tyr Gly Trp Phe His Thr Ser Leu Ile Leu Glu Gly Lys Asn Tyr  
 130 135 140  
 Leu Gln Trp Leu Thr Glu Arg Leu Thr Glu Arg Gly Val Lys Phe Phe  
 145 150 155 160  
 Gln Arg Lys Val Glu Ser Phe Glu Glu Val Ala Arg Glu Gly Ala Asp  
 165 170 175  
 Val Ile Val Asn Cys Thr Gly Val Trp Ala Gly Ala Leu Gln Arg Asp  
 180 185 190  
 Pro Leu Leu Gln Pro Gly Arg Gly Gln Ile Met Lys Val Asp Ala Pro  
 195 200 205  
 Trp Met Lys His Phe Ile Leu Thr His Asp Pro Glu Arg Gly Ile Tyr  
 210 215 220  
 Asn Ser Pro Tyr Ile Ile Pro Gly Thr Gln Thr Val Thr Leu Gly Gly  
 225 230 235 240  
 Ile Phe Gln Leu Gly Asn Trp Ser Glu Leu Asn Asn Ile Gln Asp His  
 245 250 255  
 Asn Thr Ile Trp Glu Gly Cys Cys Arg Leu Glu Pro Thr Leu Lys Asn  
 260 265 270  
 Ala Arg Ile Ile Gly Glu Ala Thr Gly Phe Arg Pro Val Arg Pro Gln  
 275 280 285  
 Ile Arg Leu Glu Arg Glu Gln Leu Arg Thr Gly Pro Ser Asn Thr Glu  
 290 295 300  
 Val Ile His Asn Tyr Gly His Gly Gly Tyr Gly Leu Thr Ile His Trp  
 305 310 315 320  
 Gly Cys Ala Leu Glu Ala Ala Lys Leu Phe Gly Arg Ile Leu Glu Glu  
 325 330 335  
 Lys Lys Leu Ser Arg Met Pro Pro Ser His Leu  
 340 345

<210> 19  
 <211> 1200  
 <212> DNA  
 <213> Homo sapiens

<400> 19  
 atg gac aca gca cgg att gca gtt gtc ggg gca ggt gtg gtg ggg ctc 48  
 Met Asp Thr Ala Arg Ile Ala Val Val Gly Ala Gly Val Val Gly Leu  
 1 5 10 15  
 tcc acg gct gtg tgc atc tcc aaa ctg gtg ccc cga tgc tcc gtt acc 96  
 Ser Thr Ala Val Cys Ile Ser Lys Leu Val Pro Arg Cys Ser Val Thr  
 20 25 30  
 atc att tca gac aag ttt act cca gat acc acc agt gat gtg gca gcc 144  
 Ile Ile Ser Asp Lys Phe Thr Pro Asp Thr Thr Ser Asp Val Ala Ala

35	40	45	
gga atg ctt att cct cac act tat cca gat aca ccc att cac acg cag			192
Gly Met Leu Ile Pro His Thr Tyr Pro Asp Thr Pro Ile His Thr Gln			
50	55	60	
aag cag tgg ttc aga gaa acc ttt aat cac ctc ttt gca att gcc aat			240
Lys Gln Trp Phe Arg Glu Thr Phe Asn His Leu Phe Ala Ile Ala Asn			
65	70	75	80
tct gca gaa gct gga gat gct ggt gtt cat ttg gta tca ggt tgg cag			288
Ser Ala Glu Ala Gly Asp Ala Gly Val His Leu Val Ser Gly Trp Gln			
85	90	95	
ata ttt cag agc act ccg act gaa gaa gtg cca ttc tgg gct gac gtg			336
Ile Phe Gln Ser Thr Pro Thr Glu Glu Val Pro Phe Trp Ala Asp Val			
100	105	110	
gtt ctg gga ttt cga aag atg act gag gct gag ctg aag aaa ttc ccc			384
Val Leu Gly Phe Arg Lys Met Thr Glu Ala Glu Leu Lys Lys Phe Pro			
115	120	125	
cag tat gtg ttt ggt cag gct ttt aca acc ctg aaa tgt gaa tgc cct			432
Gln Tyr Val Phe Gly Gln Ala Phe Thr Thr Leu Lys Cys Glu Cys Pro			
130	135	140	
gcc tac ctc ccg tgg ttg gag aaa agg ata aag gga agt gga ggc tgg			480
Ala Tyr Leu Pro Trp Leu Glu Lys Arg Ile Lys Gly Ser Gly Gly Trp			
145	150	155	160
aca ctc act cgg cga ata gaa gac ctg tgg gaa ctt cat ccg tcc ttt			528
Thr Leu Thr Arg Arg Ile Glu Asp Leu Trp Glu Leu His Pro Ser Phe			
165	170	175	
gac atc gtg gtc aac tgt tca ggc ctt gga agc aga cag ctt gca gga			576
Asp Ile Val Val Asn Cys Ser Gly Leu Gly Ser Arg Gln Leu Ala Gly			
180	185	190	
gac tca aag att ttc cct gta agg ggc caa gtc ctc caa gtt cag gct			624
Asp Ser Lys Ile Phe Pro Val Arg Gly Gln Val Leu Gln Val Gln Ala			
195	200	205	
ccc tgg gtg gag cat ttt atc cga gat ggc agt ggg ctg aca tat att			672
Pro Trp Val Glu His Phe Ile Arg Asp Gly Ser Gly Leu Thr Tyr Ile			
210	215	220	
tat cct ggt aca tcc cat gta acc cta ggt gga act agg caa aaa ggg			720
Tyr Pro Gly Thr Ser His Val Thr Leu Gly Gly Thr Arg Gln Lys Gly			
225	230	235	240
gac tgg aat ctg tcc ccg gat gca gaa aat agc aga gag att ctt tcc			768
Asp Trp Asn Leu Ser Pro Asp Ala Glu Asn Ser Arg Glu Ile Leu Ser			
245	250	255	
cga tgc tgt gct ctg gag ccc tcc ctc cac gga gcc tgc aac atc agg			816
Arg Cys Cys Ala Leu Glu Pro Ser Leu His Gly Ala Cys Asn Ile Arg			
260	265	270	
gag aag gtg ggc ttg agg ccc tac agg cca ggc gtg cga ctg cag aca			864
Glu Lys Val Gly Leu Arg Pro Tyr Arg Pro Gly Val Arg Leu Gln Thr			
275	280	285	
gag ctc ctt gcg cga gat gga cag agg ctg cct gta gtc cac cac tat			912
Glu Leu Leu Ala Arg Asp Gly Gln Arg Leu Pro Val Val His His Tyr			
290	295	300	
ggc cat ggg agt ggg ggc atc tca gtg cac tgg ggc act gct ctg gag			960
Gly His Gly Ser Gly Gly Ile Ser Val His Trp Gly Thr Ala Leu Glu			
305	310	315	320
gcc gcc agg ctg gtg agc gag tgt gtc cat gcc ctc agg acc ccc att			1008
Ala Ala Arg Leu Val Ser Glu Cys Val His Ala Leu Arg Thr Pro Ile			
325	330	335	
ccc aag tca aac ctg tag atgacataaa atgacagcaa agagactgag			1056
Pro Lys Ser Asn Leu *			
340			
agactgttga tcaaagcaca gaacagggttc aaataacttt tccactgcat gaaagttaa			1116

ttagacattt ctttgttttc aacattagaa gtggtgtaac atgtaagctg agcacggtag 1176  
 catgcctata gtcccagcta cttg 1200

<210> 20  
 <211> 2056  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 1025  
 <223> n=a, g, c or t

<400> 20  
 atg gac aca gca cgg att gca gtt gtc ggg gca ggt gtg gtg ggg ctc 48  
 Met Asp Thr Ala Arg Ile Ala Val Val Gly Ala Gly Val Val Gly Leu  
 1 5 10 15  
 tcc acg gct gtg tgc atc tcc aaa ctg gtg ccc cga tgc tcc gtt acc 96  
 Ser Thr Ala Val Cys Ile Ser Lys Leu Val Pro Arg Cys Ser Val Thr  
 20 25 30  
 atc att tca gac aag ttt act cca gat acc acc agt gat gtg gca gcc 144  
 Ile Ile Ser Asp Lys Phe Thr Pro Asp Thr Thr Ser Asp Val Ala Ala  
 35 40 45  
 gga atg ctt att cct cac act tat cca gat aca ccc att cac acg cag 192  
 Gly Met Leu Ile Pro His Thr Tyr Pro Asp Thr Pro Ile His Thr Gln  
 50 55 60  
 aag cag tgg ttc aga gaa acc ttt aat cac ctc ttt gca att gcc aat 240  
 Lys Gln Trp Phe Arg Glu Thr Phe Asn His Leu Phe Ala Ile Ala Asn  
 65 70 75 80  
 tct gca gaa gct gga gat gct ggt gtt cat ttg gta tca ggg ata aag 288  
 Ser Ala Glu Ala Gly Asp Ala Gly Val His Leu Val Ser Gly Ile Lys  
 85 90 95  
 gga agt gga ggc tgg aca ctc act cgg cga ata gaa gac ctg tgg gaa 336  
 Gly Ser Gly Gly Trp Thr Leu Thr Arg Arg Ile Glu Asp Leu Trp Glu  
 100 105 110  
 ctt cat ccg tcc ttt gac atc gtg gtc aac tgt tca ggc ctt gga agc 384  
 Leu His Pro Ser Phe Asp Ile Val Val Asn Cys Ser Gly Leu Gly Ser  
 115 120 125  
 aga cag ctt gca gga gac tca aag att ttc cct gta agg ggc caa gtc 432  
 Arg Gln Leu Ala Gly Asp Ser Lys Ile Phe Pro Val Arg Gly Gln Val  
 130 135 140  
 ctc caa gtt cag gct ccc tgg gtg gag cat ttt atc cga gat ggc agt 480  
 Leu Gln Val Gln Ala Pro Trp Val Glu His Phe Ile Arg Asp Gly Ser  
 145 150 155 160  
 ggg ctg aca tat att tat cct ggt aca tcc cat gta acc cta ggt gga 528  
 Gly Leu Thr Tyr Ile Tyr Pro Gly Thr Ser His Val Thr Leu Gly Gly  
 165 170 175  
 act agg caa aaa ggg gac tgg aat ctg tcc ccg gat gca gaa aat agc 576  
 Thr Arg Gln Lys Gly Asp Trp Asn Leu Ser Pro Asp Ala Glu Asn Ser  
 180 185 190  
 aga gag att ctt tcc cga tgc tgt gct ctg gag ccc tcc ctc cac gga 624  
 Arg Glu Ile Leu Ser Arg Cys Cys Ala Leu Glu Pro Ser Leu His Gly  
 195 200 205  
 gcc tgc aac atc agg gag aag gtg ggc ttg agg ccc tac agg cca ggc 672  
 Ala Cys Asn Ile Arg Glu Lys Val Gly Leu Arg Pro Tyr Arg Pro Gly  
 210 215 220  
 gtg cga ctg cag aca gag ctc ctt gcg cga gat gga cag agg ctg cct 720  
 Val Arg Leu Gln Thr Glu Leu Leu Ala Arg Asp Gly Gln Arg Leu Pro  
 225 230 235 240







245 250 255  
 Gly Thr Ala Leu Glu Ala Ala Arg Leu Val Ser Glu Cys Val His Ala  
 260 265 270  
 Leu Arg Thr Pro Ile Pro Lys Ser Asn Leu  
 275 280

<210> 23  
 <211> 47  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> oligonucleotide 24-1443-126

<400> 23  
 tacggcttag taagttggag aacyaggatc agaagacagg tctgcct

47

<220>  
 <221> allele  
 <222> 24  
 <223> polymorphic base C or T

<210> 24  
 <211> 47  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> oligonucleotide 24-1457-52

<220>  
 <221> allele  
 <222> 24  
 <223> polymorphic base C or A

<400> 24  
 tctgagatgc ccctgtgtcc tctmagggag tagtggctga gcatttc

47

<210> 25  
 <211> 47  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> oligonucleotide 27-93-181

<220>  
 <221> allele  
 <222> 24  
 <223> polymorphic base C or T

<400> 25  
 cccagctctg ccactggcga gctytgtggc cttgggcaag ttactcc

47

<210> 26  
 <211> 47  
 <212> DNA  
 <213> Artificial Sequence

<220>

<223> oligonucleotide 24-1461-256

<220>

<221> allele

<222> 24

<223> polymorphic base A or G

<400> 26

gatggctctg gcattttcag ggarcagtca tgtctgatct caagttc

47

Sequence